

**DISCRIMINATION IN METROPOLITAN
HOUSING MARKETS:
PHASE 2 - ASIANS AND PACIFIC ISLANDERS**

Discrimination in Metropolitan Housing Markets: Phase 2 - Asians and Pacific Islanders

Final Report

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EXECUTIVE SUMMARY

This report presents results from the second phase of the latest national Housing Discrimination Study (HDS2000), sponsored by the Department of Housing and Urban Development (HUD) and conducted by the Urban Institute. It is one of five related reports that will ultimately be produced from this major research effort:

- *Discrimination in Metropolitan Housing Markets: National Results from Phase I of HDS2000*
- *Discrimination in Metropolitan Housing Markets: Phase I - Supplement*
- *Discrimination in Metropolitan Housing Markets: Phase 2 - Asians and Pacific Islanders*
- *Discrimination in Metropolitan Housing Markets: Phase 3 - Native Americans*
- *Discrimination in Metropolitan Housing Markets: Phase 4 - Persons with Disabilities*

All of these reports present findings based upon rigorous paired tests, in which two individuals—one minority and the other white¹—pose as otherwise identical homeseekers, and visit real estate or rental agents to inquire about the availability of advertised housing units. This methodology provides direct evidence of differences in the treatment minorities and whites experience when they search for housing.

Background

Paired testing originated as a tool for fair housing enforcement, detecting and documenting individual instances of discrimination. Since the late 1970s, this methodology has also been used to rigorously measure the prevalence of discrimination across the housing market as a whole. When a large number of consistent and comparable tests are conducted for a representative sample of real estate and rental agents, the results control for differences between white and minority homeseekers, and directly measure patterns of adverse treatment based on a homeseeker's race or ethnicity.

HDS2000 is the third national paired-testing study sponsored by HUD to measure patterns of racial and ethnic discrimination in urban housing markets. Its predecessors, the 1977 Housing Market Practices Study (HMPS) and the 1989 Housing Discrimination Study (HDS) found significant levels of racial and ethnic discrimination in both rental and sales markets of urban areas nationwide. Enforcement tests conducted over the intervening decade

¹ For the study on persons with disabilities, the treatment of a person with a disability is being compared to that of a similarly qualified person without a disability

have also uncovered countless instances of illegal discrimination against minority homeseekers. Housing discrimination raises the costs of housing search, creates barriers to homeownership and housing choice, and contributes to the perpetuation of racial and ethnic segregation.

HDS2000 will ultimately involve four phases of paired testing. HUD's goals for the study include rigorous measures of change in adverse treatment against blacks and Hispanics nationwide, site-specific estimates of adverse treatment for major metropolitan areas and selected states, and new measures of adverse treatment against Asians and Pacific Islanders, American Indians, and persons with disabilities. Phase I provided national estimates of adverse treatment against blacks and Hispanics and reported on changes in the incidence of differential treatment since 1989. Phase II (with testing conducted in 2001) focuses on two major new goals: it provides the first national estimates of discrimination against Asians and Pacific Islanders, and an initial set of state estimates of discrimination against blacks and Hispanics that include small and medium-sized metropolitan areas as well as larger areas.

Phase I of HDS2000 found that significant discrimination against African American and Hispanic homeseekers still persists in both rental and sales markets of large metropolitan areas nationwide, but that its incidence has generally declined since 1989. Only Hispanic renters face no change in the incidence of consistent adverse treatment today than they did in 1989. The discriminatory practices that African Americans and Hispanics face are serious, limiting their information and options and making it more difficult for them to find the housing they need. Although the overall incidence of discrimination is generally falling, some forms of adverse treatment are rising. Black homebuyers are more likely to be steered away from predominantly white neighborhoods than they were in 1989, and Hispanic homebuyers are more likely to be denied equal information and assistance with mortgage financing. Finally, although patterns of differential treatment vary from one metropolitan area to another, only a few areas have overall levels that differ significantly from the national average, indicating that discrimination against African American and Hispanic homeseekers remains a national problems.

The HDS2000 Methodology

This study builds upon and refines the basic testing protocols that have been implemented in previous national studies and in Phase I of HDS2000. Random samples of advertised housing units were drawn from multiple advertising sources in each site on a weekly basis, and testers visited the sampled offices to inquire about the availability of these advertised units. Both minority and white partners were assigned income, assets, and debt levels to make them equally qualified to buy or rent the advertised housing unit. Test partners were also assigned comparable family circumstances, job characteristics, education levels, and housing preferences. They visited sales or rental agents, and systematically recorded the information and assistance they received about the advertised unit and/or other similar units, including location, quality and condition, rent or sales price, and other terms and conditions. Test

partners did not compare their experiences with one another or record any conclusions about differences in treatment; each simply reported the details of the treatment he or she experienced as an individual homeseeker.²

The national results presented here for Asians and Pacific Islanders are based on a sample of 11 metropolitan areas that account for more than three quarters of all Asians and Pacific Islanders living in metropolitan areas nationwide. America's Asian and Pacific Islander populations are tremendously diverse, and different ethnic sub-groups may face differing levels or forms of discrimination. However, producing rigorous estimates of discrimination for each sub-group would be extremely costly. HUD's goal for its first research effort focused on discrimination against Asians and Pacific Islanders was to produce rigorous national estimates for the populations as a whole. Therefore, testers were recruited to represent the primary groups of Asians and Pacific Islanders living in each of the sampled metropolitan areas, including people who identify themselves as Chinese, Japanese, Korean, Filipino, Vietnamese and other Southeast Asians, Native Hawaiian and other Pacific Islanders, and Asian Indians.³

Summary of Findings

Asians and Pacific Islanders face significant levels of discrimination when they search for housing in large metropolitan areas nationwide. For renters, patterns of adverse treatment are mixed; Asians and Pacific Islanders appear to be systematically favored with respect to

² HDS2000 is designed to measure the extent to which minority homeseekers experience adverse treatment when they look for housing in urban areas nationwide. The tests conducted for this study were not designed to assemble evidence of discrimination in individual cases. The question of when differential treatment warrants prosecution and the related question of whether sufficient evidence is available to prevail in court can only be resolved on a case-by-case basis, which might also consider other indicators of treatment than those reported here.

³ On October 30, 1997, the Office of Management and Budget (OMB) issued a notice that federal agencies separate Asians from Pacific Islanders and Native Hawaiians in their data collection. The information about the testers recruited for this study is more detailed than the OMB requirement, including information about which Asian, Native Hawaiian, or Pacific Islander subgroup they considered themselves to be a member (see Exhibit 2-2 in Chapter 2). In general, OMB believes that, "consistent with criteria for confidentiality and data quality, the tabulation procedures used by the agencies should result in production of as much detailed information on race and ethnicity as possible". In accordance with that guidance, the main report reflects the level of discrimination encountered by the combined Asian and Pacific Islander subgroups with breakouts in the annexes for individual subgroups for whom enough data are available to produce a reliable estimate. Specifically, the combination of all Asian subgroups without Native Hawaiians and Pacific Islanders is large enough to provide reliable estimates and those results are reported in Annex 7. The sample for Native Hawaiians and Pacific Islanders alone is not large enough to provide a reliable estimate alone so those results are not presented separately. There are some Asian subgroups in metropolitan areas that enough data were collected to report separately, and those are shown in Annex 6. Specifically, Los Angeles metropolitan area estimates are provided for Chinese and Koreans, and Minneapolis metropolitan area estimates are provided for Southeast Asians.

housing inspections. Overall, the level of *consistent adverse treatment* against Asian and Pacific Islander renters is 21.5 percent—about the same as the level for African American and Hispanic renters. However, because of the mixed pattern of adverse treatment against Asians and Pacific Islanders, the lower-bound estimate of systematic discrimination is not significantly different from zero. Asian and Pacific Islander homebuyers experience *consistent adverse treatment* 20.4 percent of the time,⁴ with systematic discrimination occurring in housing availability, inspections, financing assistance, and agent encouragement. This level of discrimination is comparable to the level experienced by African American homebuyers, and significantly higher than the level of discrimination against Hispanics.

Because the composition and history of Honolulu’s Asian and Pacific Islander populations differs quite substantially from metro areas in the mainland U.S.⁵, we explored the possibility that levels or patterns of discrimination might be different when Honolulu was excluded from the analysis. In general, however, estimates are the same for the mainland metro areas as for the nation as a whole. In addition, estimates of discrimination against Asians and Pacific Islanders seeking housing in California are comparable to estimates for the nation as a whole.

To explore variations in discrimination for different segments of the Asian and Pacific Islander populations, we compared estimates of adverse treatment for light-skinned Asians and Pacific Islanders to estimates for dark-skinned people.⁶ In addition, because Phase II of HDS2000 expanded the sample of advertised sources, we tested for differences between units advertised in major metropolitan newspapers and those advertised in other sources. Based upon these comparisons, we conclude that:

- There is little consistent evidence that dark-skinned Asians and Pacific Islanders experience higher levels of adverse treatment than light-skinned Asians and Pacific Islanders. Differences are statistically significant for only a few individual treatment indicators, however, and these results suggest that dark-skinned renters face a greater disadvantage than homebuyers with comparable skin tone.

⁴ The lower-bound estimate of systematic discrimination in sales is 19.6 percent.

⁵ In Honolulu, Asian subgroups constitute the majority race, that is they make up 55 percent of the population. Since HDS is designed to assess differences in the treatment of Asians and Pacific Islanders relative to whites, it was hypothesized that the Honolulu findings might mask the level of discrimination against Asians and Pacific Islanders on the mainland U.S.

⁶ Local testing organizations provided photographs for all testers participating in HDS2000. Based on these photographs, each tester’s skin tone was rated on a scale of one to five (palest to darkest) by at least two independent coders.

- Discrimination against Asians and Pacific Islanders seeking rental housing does not vary significantly by type of advertising source. However, Asian and Pacific Islander homebuyers appear to face a significantly higher level of discrimination when they inquire about units advertised in sources other than major metropolitan newspapers.

Experience from this research effort also suggests that the recruitment and retention of Asians and Pacific Islanders as testers may present special challenges for local fair housing organizations. Some local testing organizations that did not have already established pools of Asian and Pacific Islander testers found it difficult to recruit testers because they were unable to make inroads into the various service organizations, associations, and other networks that serve the Asian and Pacific Islander community. In addition, for some ethnic sub-groups, particularly those who are newer immigrants to the U.S., cultural issues proved to be a barrier to completing tests and retaining testers. For example, conducting sales tests was particularly daunting for testers from groups who have little homebuying knowledge or experience in the United States.

Measurement Issues

A paired test can result in any one of three basic outcomes for any measure of treatment: 1) the white tester is favored over the minority; 2) the minority tester is favored over the white; or 3) both testers receive the same treatment (which may be either favorable or unfavorable). The simplest measure of adverse treatment is the share of all tests in which the white tester is favored over the minority. Because there are also tests in which minority testers receive better treatment than their white partners, we report both the incidence of white-favored treatment and the incidence of minority-favored treatment.

Gross and Net Measures. Although these simple *gross measures* of white-favored and minority-favored treatment are straightforward and easily understandable, they almost certainly overstate the frequency of systematic discrimination.⁷ Specifically, differential treatment may occur during a test not only because of differences in race or ethnicity, but also because of random differences in the circumstances of their visits to the real estate agency. For example, in the time between two testers' visits, an apartment might have been rented, or the agent may have been distracted by personal matters and forgotten about an available unit. Gross

⁷ We use the term "systematic discrimination" to mean differences in treatment that are attributable to a customer's race or ethnicity, rather than to any other differences in tester characteristics or test circumstances. This term is not the same as "intentional" discrimination, nor is it intended to mean that these differences would necessarily be ruled as violations of federal fair housing law.

measures of white-favored and minority-favored treatment include both random and systematic elements, and therefore provide *upper-bound estimates* of systematic discrimination.⁸

One strategy for estimating systematic discrimination, that is, to remove the cases where non-discriminatory random events are responsible for differences in treatment, is to subtract the incidence of minority-favored treatment from the incidence of white-favored treatment to produce a *net measure*. This approach essentially assumes that all cases of minority-favored treatment are attributable to random factors—that systematic discrimination never favors minorities—and that random white-favored treatment occurs just as frequently as random minority-favored treatment. Based on these assumptions, the net measure subtracts differences due to random factors from the total incidence of white-favored treatment. However, it seems possible that sometimes minorities may be systematically favored on the basis of their race or ethnicity. If so, the net measure subtracts not only random differences but some systematic differences, and may therefore understate the frequency of systematic discrimination.⁹

It is possible to adapt the basic paired testing methodology to directly observe how often random differences in treatment occur. Specifically, in two metropolitan areas, Phase II of HDS2000 conducted three-part tests. In these tests, a white tester was followed by two minorities or a minority tester was followed by two whites, all following the same protocols. Comparing the treatment of the two same-race testers provides a direct estimate of random (non race-based) differential treatment. This exploratory triad testing effort suggests that most, if not all minority-favored treatment is random; it provides no convincing evidence that minority-favored treatment systematically exceeds differences in the treatment of same-race testers. However, because these results are based on a relatively small number of tests in only two metropolitan areas, they should be viewed as preliminary and require further confirmation.

The body of this report presents both gross and net measures, because in combination, they indicate not only how often whites are favored over comparable minority homeseekers, but the extent to which white-favored treatment systematically exceeds minority-favored treatment.

⁸ Note that it is conceivable that random factors might *reduce* the observed incidence of white-favored or minority-favored treatment, so that the gross-incidence measure is technically not an absolute upper-bound for systematic discrimination.

⁹ Even when no statistical pattern of race-based differential treatment is observed, individual cases of discrimination may occur. Specifically, even if the gross incidence of white favored treatment is statistically insignificant, this does not mean that discrimination never occurred, but only that the number of cases was too small to draw any conclusions about systematic patterns across the sample as a whole. Similarly, for variables where the net measure is close to zero, there may in fact be instances of race-based discrimination, even though the overall pattern does not systematically favor one group.

These two measures provide upper- and lower-bound estimates of systematic discrimination against minority homeseekers.

Summary Measures. A visit with a rental or sales agent is a complex transaction, and may include many forms of favorable or unfavorable treatment. This report presents results for a series of fourteen individual rental treatment indicators and fifteen sales treatment indicators, but also combines these individual indicators to create *composite measures* for categories of treatment (such as housing availability or housing costs) as well as for the transaction as a whole. For rental tests, treatment measures include the availability of advertised and similar units, opportunities to inspect units, housing costs, and the encouragement and assistance from rental agents. For sales tests, measures include the availability of advertised and similar homes, opportunities to inspect homes, the neighborhood characteristics of recommended and inspected homes, assistance with mortgage financing, and encouragement and assistance from the sales agent.

Two types of composite measures have been constructed. *Consistency measures* reflect the extent to which the different forms of treatment that occur in a visit consistently favor one tester over the other. Specifically, tests are classified as white-favored if the white tester received favorable treatment on one or more individual items, while his or her partner received *no* favorable treatment. Tests were classified as “neutral” if one tester was favored on some individual treatment items and his or her partner was favored on even one item. Consistency measures were used in 1989 to summarize testing results across individual treatment indicators. In HDS2000, however, we also developed *hierarchical measures* by considering the relative importance of individual treatment measures to determine whether one tester was favored over the other. For each category of treatment measures and for the full set of measures, a hierarchy of importance was established *independently* of the testing results, to provide an objective set of decision rules for comparing treatment across indicators.¹⁰

The body of this report presents both consistency measures and hierarchical measures. These alternative measures (including both lower-bound and upper-bound estimates of systematic discrimination) generally tell a consistent story about the existence of discrimination at the national, state, and metropolitan level.

Strengths and Limitations of This Research

Paired testing is a powerful tool for directly observing differences in the treatment that minority and white homeseekers experience when they inquire about the availability of

¹⁰ Again, it is important to emphasize the difference between methods used for the statistical analysis of paired testing results and methods used to assemble or assess evidence of unlawful conduct in an individual case. No pre-determined set of decision criteria can substitute for case-by-case judgements about test results.

advertised housing units. Despite the strengths of this methodology, HDS2000, like previous national paired testing studies, is limited in its coverage of metropolitan housing markets and the experience of minority homeseekers. The sample of real estate and rental agents to be tested was drawn from newspaper advertisements, and the economic characteristics of tester teams were matched to the characteristics of the advertised units. However, not all housing units for sale or rent are advertised, not all real estate and rental agents use advertising to attract customers, and not all homeseekers rely upon published advertisements in their housing search. Therefore, results presented here do not necessarily reflect the experience of the typical minority homeseeker, but rather of homeseekers qualified to rent or buy the average housing unit advertised in a readily available information source.

Moreover, the results presented here do not encompass all phases of the housing market transaction. HDS2000, like most paired testing studies, focuses on the initial encounter between a homeseeker and a rental or sales agent. Additional incidents of adverse treatment may occur later in the housing transaction, when a renter submits an application or negotiates lease terms, or when a homebuyer makes an offer on a particular unit or applies for mortgage financing.

Finally, as discussed earlier, this study provides information about housing discrimination against the Asians and Pacific Islander populations as a whole, when there are good reasons to suspect that different ethnic sub-groups may face different levels or forms of discrimination. More targeted testing studies would be needed to develop reliable estimates of discrimination against individual Asian and Pacific Islander sub-groups in parts of the country where their numbers are significant. In spite of these important limitations, Phase II of HDS2000 provides the first rigorous national estimates of discrimination against Asians and Pacific Islanders, and presents compelling evidence that they face significant levels of discrimination, particularly when they search for homebuyer housing in metropolitan areas nationwide.

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1. BACKGROUND AND INTRODUCTION

This report presents findings from the second phase of the latest national Housing Discrimination Study (HDS2000), sponsored by the Department of Housing and Urban Development (HUD) and conducted by the Urban Institute. HDS2000 is the third national paired-testing study sponsored by HUD to measure patterns of racial and ethnic discrimination in U.S. housing markets. The first phase of HDS2000 rigorously measured current levels of adverse treatment against African Americans and Hispanics for large metropolitan areas nationwide and tracked significant changes in these levels since 1989. It concluded that discrimination still persists in both rental and sales markets of large metropolitan areas nationwide, but that its incidence has generally declined since 1989.¹ Phase I also produced metropolitan-level estimates of adverse treatment for African American and Hispanic homeseekers in twenty metropolitan areas.

Phase II of HDS2000 extends the paired testing methodology to produce three new sets of findings. First, Phase II provides the first national estimates of discrimination against Asians and Pacific Islanders (APIs) living in large metropolitan areas throughout the United States as well as state-level results for California. Second, it provides state-level estimates of discrimination against African Americans and Hispanics that cover both large and smaller metropolitan areas.² Specifically, state-level results are available for black/white discrimination in Alabama, Georgia, California, and New York, and for Hispanic/non-Hispanic white discrimination in California. Finally, Phase II provides metropolitan-level estimates of discrimination against African Americans and Hispanics in Baltimore (black/white tests) and Miami (Hispanic/non-Hispanic white tests)—two major metropolitan areas that were not part of the Phase I sample. This report presents the level of discrimination experienced by Asians and Pacific Islanders. A companion report, *Discrimination in Metropolitan Housing Markets: Phase I - Supplement*, presents the state level estimates of discrimination for blacks and Hispanics and the Baltimore and Miami results.

Paired Testing Methodology

In a paired test, two individuals—one minority and the other white—pose as otherwise identical homeseekers, with comparable housing needs and resources. Both testers visit a real estate or rental agent to inquire about the availability of housing, making the same requests and

¹ See M.A. Turner, S. Ross, G. Galster, J. Yinger (2002) *Discrimination in Metropolitan Housing Markets: National Results from Phase I of HDS2000*. Washington, D.C.: U.S. Department of Housing and Urban Development.

² Phase II resources were also used to complete additional tests in two Phase I sites where local fair housing groups were not able to complete sufficient tests for metropolitan report cards.

providing the same information about themselves. Each tester systematically records the information and assistance he or she receives from the agent. If the minority and white are treated differently in important ways, a test provides direct and powerful evidence of differences in the treatment minorities and whites experience when they search for housing.

Paired testing originated as a tool for fair housing enforcement, detecting and documenting individual instances of discrimination. Since the late 1970s, this methodology has also been used to rigorously measure the prevalence of discrimination across the housing market as a whole. When a large number of consistent and comparable tests are conducted for a representative sample of real estate and rental agents, the results directly measure patterns of adverse treatment based on a homeseeker's race or ethnicity.

For the results presented here, basic testing protocols largely replicated those implemented in Phase I and earlier paired testing research. However, based on recommendations from a workshop convened by the National Academy of Sciences³ and from fair housing practitioners, we enhanced our procedures for drawing samples of available housing units. Instead of relying upon the classified advertising sections of a single major newspaper in each metropolitan area, samples of available housing units were drawn from multiple advertising sources, including community newspapers, homeseeker guides, and the internet, as well as major metropolitan newspapers. This methodology more fully reflects metropolitan housing market as a whole.

Testers visited the sampled offices to inquire about the availability of these units. Both minority and white partners were assigned income, assets, and debt levels to make them equally qualified to buy or rent the advertised housing unit. Test partners were also assigned comparable family circumstances, job characteristics, education levels, and housing preferences. They took turns visiting sales or rental agents and systematically recorded the information and assistance they received about the advertised unit and/or other similar units, including location, quality and condition, rent or sales price, and other terms and conditions. Test partners did not compare their experiences with one another or record any conclusions about differences in treatment; each simply reported the details of the treatment he or she experienced as an individual homeseeker.⁴

³ A.W. Foster, F. Mitchell, and S.E. Feinberg (2002) *Measuring Housing Discrimination in a National Study: Report of a Workshop*. Washington, D.C.: National Academy Press.

⁴ HDS2000 is designed to measure the extent to which minority homeseekers experience adverse treatment when they look for housing in metropolitan areas nationwide. The tests conducted for this study were not designed to assemble evidence of discrimination in individual cases. The question of when differential treatment warrants prosecution and the related question of whether sufficient evidence is available to prevail in court can only be resolved on a case-by-case basis.

HDS2000 Study Scope

HDS2000 will ultimately involve four phases of paired testing. HUD’s goals for the study include rigorous measures of change in adverse treatment against blacks and Hispanics nationwide, site-specific estimates of adverse treatment for major metropolitan areas, statewide estimates of adverse treatment that encompass smaller metropolitan areas and adjoining rural communities, and new measures of adverse treatment against Asians and Pacific Islanders, American Indians, and persons with disabilities.

Phase II (with testing conducted in 2001) was designed to provide national estimates of discrimination against Asians and Pacific Islanders, statewide estimates of discrimination against Asians and Pacific Islanders, blacks, and Hispanics, and two additional metropolitan estimates. Moreover, in order to empirically observe differences in treatment that may occur randomly in the course of paired testing and to refine estimates of systematic discrimination, we conducted three-part tests in Baltimore and Miami. Each three-part test involved a minority tester followed by two white testers, or a white tester followed by two minority testers, all following the same protocols. Exhibit 1-1 summarizes the key design components of Phase II of HDS2000. This report presents results for discrimination against Asians and Pacific Islanders.⁵

Exhibit 1-1: Phase II Study Scope

National Estimates for Asians and Pacific Islanders	✓ national estimate of discrimination against Asians and Pacific Islanders based on testing in 9 major metro areas
Metropolitan Estimates	<ul style="list-style-type: none"> ✓ two major metropolitan areas that were not covered during Phase I ✓ black/white testing in both sites ✓ black/white <i>and</i> Hispanic/non-Hispanic white testing in one site
State-Wide Estimates	<ul style="list-style-type: none"> ✓ metropolitan areas (large and small) in four states ✓ black/white testing in four states ✓ Hispanic/non-Hispanic white testing in one state ✓ Asian and Pacific Islander/white testing in one state
Sample of Available Housing Units	✓ advertisements drawn from multiple sources to more fully reflect units available in the local housing market
Estimating Systematic Discrimination	✓ three-part tests in the metropolitan report card sites
Total Number of Tests	✓ 2,012 of which 420 are three-part

⁵ For statewide black and Hispanic estimates, two additional metropolitan estimates, and analysis of three-part tests, see *Discrimination in Metropolitan Housing Markets: Phase I - Supplement*.

HDS2000, like previous national paired testing studies, is limited in its coverage of metropolitan housing markets and the experience of minority homeseekers. The sample of real estate and rental agents to be tested was drawn from newspaper advertisements, and the economic characteristics of tester teams were matched to the characteristics of the advertised units. However, not all housing units for sale or rent are advertised, not all real estate and rental agents use advertising to attract customers, and not all homeseekers rely upon advertisements in their housing search. Therefore, results presented here do not necessarily reflect the experience of the typical minority homeseeker, but rather of homeseekers qualified to rent or buy the average housing unit advertised in a publicly available information source.

Moreover, the results presented here do not encompass all phases of the housing market transaction. HDS2000, like most paired testing studies, focuses on the initial encounter between a homeseeker and a rental or sales agent. Additional incidents of adverse treatment may occur later in the housing transaction, when a renter submits an application or negotiates lease terms, or when a homebuyer makes an offer on a particular unit or applies for mortgage financing. Despite these limitations, HDS2000 provides the most complete and up-to-date information available about the incidence and severity of housing market discrimination against minority homeseekers in large metropolitan areas of the United States today.

Organization of the Report

The remainder of this report consists of three chapters. Chapter 2 presents the methodology implemented in Phase II of HDS2000, including the samples of metropolitan areas in which tests were conducted, the procedures used to draw samples of available housing units in each of these metropolitan areas, the testing protocols implemented for both rental and sales housing, and the statistical procedures used to estimate the incidence of adverse treatment. Chapter 3 presents current national estimates of adverse treatment against Asians and Pacific Islanders as well as state-level estimates for California. Chapter 4 discusses potential variations in adverse treatment against Asians and Pacific Islanders by skin color and advertising source. A series of technical annexes accompany this report, including national estimates without Honolulu and comparison of Asian and Pacific Islander results with black and Hispanic results for a common sample of sites.

2. PHASE II DESIGN AND METHODOLOGY

Although the paired testing methodology originated as a tool for fair housing enforcement, it has been successfully adapted for research purposes. In order to yield reliable measures of differential treatment in housing market transactions, paired testing must be applied to a representative sample of housing providers or available housing units in selected markets, and must adhere to highly standardized protocols. Phase II of HDS2000 builds upon the experience of Phase I to enhance and extend the paired testing methodology, producing the first national estimates of discrimination against Asians and Pacific Islanders. In addition, Phase II improved the procedures for sampling available housing units to draw from multiple advertising sources. This chapter describes the sampling procedures, testing protocols, and analysis techniques implemented in Phase II of HDS2000.

Sampling

Sampling was based on an *integrated two-stage design*. In the first-stage, sites were drawn with certainty from the relevant population of sites in order to provide maximum coverage of the Asian and Pacific Islander population within U.S. Metropolitan Statistical Areas (MSAs). In the second stage of selection, ads for rental and sales housing were selected with probability sampling from multiple advertising sources covering the sample sites during the testing period.

National Sample of Metropolitan Areas with Significant Asian and Pacific Islander Populations. The results presented in this report are based on a nationally representative sample of eleven metropolitan areas with population greater than 100,000 where Asians and Pacific Islanders constitute a significant portion of the population. Our strategy for site selection in Phase II was fundamentally different from the Phase I national sample design approach, for good reason. The Phase I design sought to develop national estimates from a large list of qualifying metro areas that was used as a sampling frame. Thus, sites were selected with probabilities proportional to population using a stratified design, and the sampled MSA represents all MSAs in its constituent stratum. For Phase II, the situation is quite different. The nation's Asian and Pacific Islander population is highly clustered in a small number of metro areas. If we were to draw a random sample of metropolitan areas, we would introduce statistical variation at the site level (as a result of using a two-stage design), as well as the test level. Instead, we selected with certainty the sites that maximized population coverage, eliminating the cluster sampling, and thereby realizing gains in statistical precision.¹

¹ This approach poses a minor risk of small non-coverage bias, but the benefits of our design far exceed the potential liabilities (which we see as minor).

Specifically, we selected the ten metropolitan areas with the largest Asian and Pacific Islander populations plus Minneapolis, MN where testing was conducted in phase I. These metropolitan areas account for 77 percent of all Asians and Pacific Islanders living in U.S. metropolitan areas. Asian and Pacific Islander testing was conducted in Los Angeles as part of Phase I of HDS2000. Therefore, Phase II testing was conducted in the nine remaining metropolitan areas, providing excellent representation of all metropolitan Asians and Pacific Islanders nationwide (see Exhibit 2-1).²

Exhibit 2-1: Metropolitan Areas with Significant Asian and Pacific Islander Populations and Sample Sizes

MSA / PMSA	# API Tests (Rental/Sales)
Anaheim--Santa Ana, CA	29/27
Chicago, IL	22/19
Honolulu, HI	37/35
Los Angeles, CA*	149/142
Minneapolis, MN*	77/16
New York, NY	47/50
Oakland, CA	25/25
San Diego, CA MSA	20/21
San Francisco, CA	30/30
San Jose, CA	27/25
Washington, DC--MD—VA	18/18
* Phase I sites	
Total	481/408

% of Metro API Population in U.S.: 77%

² Pooling tests from Phases I and II raises methodological concerns. Although it seems entirely plausible to assume that patterns of discrimination change slowly and that data from consecutive years can reasonably be combined, we do not know with certainty how much the expanded ad sampling process will affect measures of discrimination. Unfortunately, however, this potential source of bias must be accepted, because it would not be cost effective to conduct a new sample of Asian and Pacific Islander tests in Los Angeles, given that such a large number of tests were conducted there in Phase 1.

By selecting sites with certainty rather than with probabilities, sites are transformed from being “clusters used in two-stage sampling” to being “strata in a stratified sample.” This occurs because each site now represents only itself rather than the pool (or stratum) of metro areas from which it was drawn. Consequently, the issue of proportionate versus disproportionate allocation of tests becomes an issue. An equal allocation of tests to sites is the appropriate approach for two-stage sampling with probabilities proportional to size (pps). But it is not appropriate to allocate equal numbers of tests to sites when the sites represent only themselves, except in the unlikely event that all sites have the same minority population size. We therefore allocated tests to sites in proportion to the size of their Asian and Pacific Islander population. A total of 255 rental tests and 250 sales tests were conducted across the nine Phase II Asian and Pacific Islander sites. In Phase I, 226 Asian and Pacific Islander rental tests and 158 Asian and Pacific Islander sales tests were conducted in Los Angeles and Minneapolis. While the precision of individual estimates may vary based on the variance in response patterns, with totals of 481 rental tests and 408 sales tests,³ we expect to be able to detect net differences in treatment that exceed 5 percentage points at a 95 percent confidence level.

The Asian and Pacific Islander population is extremely diverse, composed of many different ethnic sub-groups. In Phase I, testing focused on measuring the incidence of discrimination against particular sub-groups (Chinese and Koreans in Los Angeles and Southeast Asians in Minneapolis). But for Phase II our goal was to develop estimates of discrimination for a national cross-section of Asians and Pacific Islanders. Therefore, for each metropolitan area in the national sample, we identified the predominant Asian and Pacific Islander sub-groups, and required local testing organizations to recruit and deploy testers from these groups, in rough proportion to their representation metro-wide. Exhibit 2-2 identifies the predominant sub-groups for each testing site, and the actual number of tests conducted for each sub-group.

³ Note that the effective sample size is closer to 300 tests for both rental and sales, because the Phase I sites are substantially over-represented relative to their population.

Exhibit 2-2: Percent of Population for API Subgroups* and Actual Number of Tests per Tenure

	Anaheim, CA			Chicago, IL			Honolulu, HI			New York, NY			Oakland, CA		
	%	# Tests		%	# Tests		%	# Tests		%	# Tests		%	# Tests	
		R	S		R	S		R	S		R	S		R	S
Asian Indian	*	*	*	23	6	10	*	*	*	18	7	18	7	0	0
Chinese	17	3	2	17	8	0	12	5	4	45	30	20	34	17	22
Filipino	12	4	4	25	4	6	23	7	8	9	0	0	29	2	2
Hawai'ian	*	*	*	*	*	*	17	5	3	*	*	*	*	*	*
Japanese	12	8	3	7	1	0	38	18	15	*	*	*	8	0	0
Korean	15	6	3	15	3	0	*	*	3	14	4	11	*	2	1
Vietnamese	28	8	15	*	*	*	*	2	*	*	*	*	6	4	0
Other**	16	0	0	13	0	3	10	0	2	14	6	1	16	0	0
TOTAL	100	29	27	100	22	19	100	37	35	100	47	50	100	25	25

	San Diego, CA			San Francisco, CA			San Jose, CA			Washington, DC			
	%	# Tests		%	# Tests		%	# Tests		%	# Tests		
		R	S		R	S		R	S		R	S	
Asian Indian	*	*	*	*	*	*	8	0	0	18	4	9	R – Rental S – Sales Source: 1990 Census
Chinese	10	2	2	51	15	21	25	6	9	20	4	3	
Filipino	49	10	10	26	10	4	23	17	12	13	1	0	
Hawai'ian	*	*	*	*	*	*	*	*	*	*	*	0	
Japanese	9	2	3	7	2	2	11	0	0	*	*	0	
Korean	*	4	4	*	*	*	*	*	*	20	4	2	
Vietnamese	10	2	2	*	3	3	21	4	4	12	0	0	
Other**	22	0	0	16	0	0	12	0	0	17	5	4	
TOTAL	100	20	21	100	30	30	100	27	25	100	18	18	

*Sub-groups were included if they represented at least 5% of the total Asian and Pacific Islander population in the MSA.

**"Other" includes all other Asian and Pacific Islander sub-groups.

Sample of Advertised Housing Units. The basic objective of a paired testing study is to observe the relative treatment that housing agents provide to white and minority homeseekers in the private market. Because we are measuring agent behavior, we would ideally draw a representative sample of rental and sales agents, where an agent's probability of selection reflects his or her share of available housing units. In addition, our sampling methodology needs to provide information about housing being offered by each agent. This information allows both members of a testing team to be assigned characteristics (such as household size and income) and preferences (such as housing type and location) that correspond to housing that an agent actually has to offer.⁴

The three national paired testing studies conducted to date have all relied upon classified advertisements in major metropolitan newspapers to generate samples of rental and sales agents. The Housing Market Practices Study (HMPS, conducted in the late 1970s) drew a single sample of advertisements from the Sunday classified section of each metropolitan area's primary newspaper (Wienk et al 1979). Tester teams were assigned characteristics and preferences consistent with the sampled housing units, and visited the corresponding agents inquiring generally about available housing. In the 1989 Housing Discrimination Study (HDS), this methodology was refined to involve weekly samples of available housing units, again drawn from the classified advertising sections of each metropolitan area's major newspaper (Turner, Struyk, and Yinger 1989). This refinement allowed testers to begin each visit by inquiring about a particular housing unit, making the tests more credible and allowing both white and minority testers to send agents the same implicit signals about housing preferences. Phase I of HDS2000 replicated this approach, drawing weekly samples of advertisements from the Sunday classified section of each metropolitan area's major newspaper.⁵

The weekly ad-sampling methodology offers several important benefits. It yields a representative sample of housing agents who use the major metropolitan newspaper to advertise available units, where an agent's probability of selection is proportionate to his or her share of all units advertised in this way. Because metropolitan newspapers are readily available, regardless of race, ethnicity, or other characteristics, this sampling frame includes agents who can realistically be accessed by any homeseeker. In addition, the weekly sampling methodology provides a consistent and credible starting point for each test, tying the characteristics and preferences of testers to housing actually available from the sampled agent, and sending consistent signals from both members of a tester team. Finally, this methodology addresses one of the major ethical concerns about paired testing—that it imposes an

⁴ For a more detailed discussion of sampling principles, see chapter 2 of *Research Design and Analysis Plan for Housing Discrimination Study 2000*, The Urban Institute, March 2000.

⁵ In addition, Phase I of HDS2000 experimented with alternative methods for identifying and sampling available units, as discussed further below.

unreasonable cost burden on housing agents who have to spend time responding to testers' inquiries and potentially violates their expectations of privacy regarding these inquiries (Fix and Struyk 1992). By advertising in a widely available outlet, a housing agent is explicitly inviting inquiries from the general public.

Despite the many advantages of this sampling methodology, relying upon metropolitan newspapers to represent the housing market as a whole has significant weaknesses. Analysis of data from the 1989 HDS suggested that houses for sale in minority neighborhoods may be under-represented among advertisements drawn from a metropolitan area's major newspaper (Turner, Edwards, and Mikelsons 1991). Other research has suggested that housing providers in some white neighborhoods may also avoid newspaper advertising in order to minimize their exposure to minority customers (Galster, Freiberg, and Houk 1987). Moreover, during Phase I of HDS2000, several of the local testing organizations indicated that relatively few rental housing providers in their areas used the major metropolitan newspaper at all, while in other sites, the primary day for rental advertising was different from the primary day for sales ads (Sunday).⁶ Thus, there is growing sentiment that relying exclusively on advertisements drawn from the Sunday classified section of a single, metropolitan newspaper may not adequately represent rental and sales units available or the housing agents who are active in the market. This was a concern raised by several participants in a workshop convened by the National Academy of Sciences to review the HDS2000 methodology.

Although our Phase I sampling methodology basically replicated the 1989 HDS approach, we also experimented with two possible strategies for addressing the limitations of metropolitan newspapers ads. First, in four major metropolitan areas, we over-sampled newspaper advertisements from geographic areas that were under-represented in the newspaper sample. And, second, in five sites, we supplemented our ad sample with available housing units identified through alternative sources, including community newspapers, apartment- and home-seeker guides, church bulletin boards, and for sale and rent signs displayed on properties. These "non-ad" samples were targeted to neighborhoods that appeared to be excluded from our metropolitan newspaper sampling.⁷ We found both over-sampling and non-ad sampling to be technically feasible, though costly, and this experience helped inform our consideration of alternative sampling procedures. Analysis of Phase I data found no consistent differences across metro areas in levels of discrimination for different ad sources, but suggested that for some metro areas, relying exclusively on major metropolitan newspapers may understate discrimination against African Americans.

⁶ Note that concerns raised by local organizations almost all involved the rental market. Generally, local fair housing groups felt that the metropolitan ad sample adequately represented the sales market.

⁷ For a more detailed discussion of these exploratory sampling methods, see chapter 2 of *Research Design and Analysis Plan for Housing Discrimination Study 2000*, The Urban Institute, March 2000.

In Phase II of HDS2000 we drew samples of available housing units from multiple advertising sources, using a different information source each week for each metropolitan area. This strategy addresses the important limitations of our Phase I approach, providing more complete coverage of housing units for available for sale and rent throughout the metropolitan market, while retaining its advantages. As discussed earlier, sampling on the basis of advertised housing produces a representative sample of rental and sales agents that reflects their share of the current market. It provides a consistent and credible entry point for the testing protocols, allowing both members of a testing team to send the same signals about their housing needs and preferences. And because it relies on widely available advertising sources, this approach does not raise new ethical or privacy concerns with respect to housing providers. By drawing from multiple sources, selected to maximize coverage of geographic areas and market segments, we hope to better represent the full range of available housing units. And by rotating across different ad sources from week to week, we will avoid the problem that a unit advertised in multiple sources might have a higher probability of selection in any given week's sample.

Four basic steps were required to produce samples for each Phase II site:

- Select a set of advertising sources that provides reasonably complete coverage for the metropolitan housing market.
- Develop a schedule for rotating across sources on a weekly basis.
- Establish an efficient sampling protocol for each advertising source.
- Draw weekly ad samples.

Select advertising sources. For each metropolitan area selected for Phase II testing, we assembled an inventory of potential advertising sources. Drawing from media directories, the internet, and local informants, we prepared a list of newspapers, internet sites, and guides that area housing agents use to advertise rental and sales units. Excluded from this inventory were foreign language sources, sources with very small circulation or ad volumes, sources produced by a single real estate or rental company, sources that require the user to specify housing preferences in order to obtain listings, and sources that are not readily available to the general public. Based upon this inventory, we selected a set of sources that provided reasonably complete coverage of rental and sales advertisements for the metropolitan housing market as a whole. A different set of sources was typically selected for rental advertising than for sales advertising. One or more major metropolitan dailies were always included among the selected sources, although in some cases we found that the primary day for housing advertisements differed between newspapers or for rental and sales ads. City and suburban community papers were included if they provided a reasonable volume of advertisements for specific geographic sub-areas. Similarly, minority newspapers were selected if they had reasonably large ad

volumes and appeared to cover geographic areas or sub-markets not otherwise represented. We included internet sources if local informants indicated that they were widely utilized and if they offered a significantly different (or larger) selection of advertisements than published sources.⁸ Finally, we included free apartment-seekers and/or homeseekers guides and advertising circulars if they were available locally. Annex 1 identifies the actual sources selected for each metro area, and the share of tests conducted for units advertised in major metropolitan newspapers compared to other types of sources.

Develop a rotational schedule. Once a reasonable set of advertising sources was selected for a metropolitan area, we developed a schedule for rotating across sources on a weekly basis. Our goals in developing this schedule were to minimize the overlap between sources that might be used in the same week, to sample on the most appropriate day of the week for each source, and to ensure an adequate number of advertisements from which to sample each week. Thus, a source that covered all or most of a metro area (such as a major metro newspaper or a metro-wide internet site) would be the only source utilized in a given week. In contrast, several sources that targeted different geographic sub-areas might be combined in the same week. Finally, sources that were published monthly rather than daily or weekly were generally utilized during the weeks when they are first released. Exhibit 2-3 provides an illustrative example of a typical rotational schedule.

Exhibit 2-3: Illustrative Ad-Sampling Plan for One Metropolitan Area

Week	Rental Ad Source	For-Sale Ad Source
1	Major metro newspaper #1	Major metro newspaper #1
2	Classified ads from three community newspapers, each serving a different geographic sub-area	Classified ads from three community newspapers, each serving a different geographic sub-area
3	Major metro newspaper #2	Major metro newspaper #2
4	Monthly apartment-seekers guide	Internet version of home sales ads from 7 suburban papers (single publisher)
5	Major metro newspaper #1	Major metro newspaper #1
6	Classified ads from three community newspapers, each serving a different geographic sub-area	Classified ads from three community newspapers, each serving a different geographic sub-area
7	Major metro newspaper #2	Major metro newspaper #2
8	Monthly apartment-seekers guide	Internet version of home sales ads from 7 suburban papers (single publisher)

⁸ When internet sites included essentially the same ads as other sources, we were reluctant to send out large numbers of testers indicating that they found an ad on the internet for fear of raising suspicion and risking disclosure of the study. Despite the growing use of personal computers and the internet, many households—particularly minorities and lower-income households—do not have access to this information source.

Establish sampling protocols. For each advertising source to be utilized, we developed a specific sampling protocol, building on our experience from Phase I. Specifically, in Phase I, two basic sampling protocols were applied, depending upon the physical lay-out of the classified advertising sections. The first protocol—spatial sampling—used a series of cardboard stencils with holes at random intervals to select blocks of text from each page of newspaper advertising. Then, any eligible ads within these blocks were included in the sample. The second basic protocol—systematic sampling—used randomly generated numbers to select a starting point, and then sampled every “nth” ad to yield the target sample size. Both of these procedures require advance information about the lay-out of advertising pages, the approximate volume and density of ads, and the target sample size to be drawn

Not all advertised housing units are eligible for inclusion in our sample. Some types of ads are not suitable for our paired testing protocols. For example, subsidized rental housing units must be excluded, because they impose specialized income and other eligibility criteria for tenants, and homes for sale by owner are excluded because they do not contribute to the sample of housing *agents* active in the local housing market. Phase II sampling protocols made only three changes to the eligibility criteria used in Phase I:

- Co-operative housing units were *included* among units for sale, because in some housing markets they represent an important source of entry-level homeownership opportunities, and because they do not differ significantly from condominiums with respect to the initial application and inspection process.
- Rental units in small buildings (four units or fewer) were *included*, because small properties often constitute a substantial share of the local rental market and because the owner may own additional properties (making him or her subject to federal fair housing laws).
- Manufactured or mobile homes were *included* among units for sale *or* rent if they were already installed on a site, because in smaller metropolitan areas they may represent an important source of affordable housing.⁹

Draw weekly samples. Once a Phase II site was ready to begin testing, we drew ad samples on a weekly basis, applying the site-specific rotational schedule and sampling protocols outlined above. Based on experience from Phase I, the weekly samples were two to three times larger than the target number of tests to be conducted in a given week, in part because some advertisements that appear to be eligible for inclusion in the sample turn out to be ineligible when further information is gathered on site, and in part because some advertised housing units are no longer available by the time testers call to schedule a visit. Each week we

⁹ Mobile homes being sold by dealerships were not included.

drew roughly equal numbers of ads for a given site. To the greatest extent possible, we combined ad sources so that the ad volume of the frame sets was roughly equal from week to week, making the sampling rates approximately the same. Within a given week, all ad sources had the same sampling rate applied to generate the ads for testing. This means that a proportionate stratified sample was drawn across frame sources in a given week, with each frame source representing a different stratum.

Although specific sampling protocols varied by site and source of advertisements, the basic process consisted of the following six steps:

- Prepare the sampling frame, removing pages that do not include any eligible ads.
- Apply the sampling protocol developed for the site and ad source to randomly select the target number of advertisements.
- Verify the eligibility of each advertisement as it is selected for inclusion in the sample.
- Record all the information from the advertisement for transmission to the local testing organization.
- Once the sample has been selected, randomize the sequence of advertisements in the sample, so that the order in which ads are used to initiate tests does not correspond to the order in which they appear in the ad source or the order in which they were drawn into the sample.
- Transmit the sample to the local testing organization.¹⁰

Each testing site received one rental sample and one sales sample each week, though not always on the same day each week. If a sample proved to be too small for a particular site in a given week, additional sample units were drawn from the same advertising source at the request of the testing organization.

Analytic Weights. Analytic weights were generated to produce national estimates for the population of inference, which in HDS2000 comprises the collection of housing agents who interact with minority households seeking to purchase or rent a home and who use housing advertisements as their entryway into the housing market. More specifically, we developed a model-based weighting approach that balances the sample by stratum using Census 2000 data. The weights are *model based* in that they rely on a plausible “model” that posits the distribution of housing agents being distributed like population. Specifically, the model assumes that the

¹⁰ As discussed further below, Phase II of HDS2000 developed a web-based data entry system for transmitting and managing data. Therefore, ad sampling information was entered into this system by Urban Institute staff and immediately became available to local testing coordinators on a secure web site.

percentage distribution of minority population across sampling strata reflects the percentage distribution of agents who serve minority homeseekers across those strata.

The methodology for calculating the analytic weights is relatively straightforward. It involves the creation of a two-factor weight:

$$\text{AWT} = \text{SWT} \times \text{POP_ADJ} \quad (1)$$

Where AWT denotes the *analytic weight*, SWT represents the first stage sampling weight, and POP_ADJ represents a *population adjustment* using Census 2000 data (calculated separately for each tenure).

The stage-one sampling weight is simply the reciprocal of a site's selection probability:

$$\text{SWT}(i) = 1 \quad (2)$$

since all sites were chosen with certainty. The population adjustments, POP_ADJ, represent enhancements to the sampling weights that align the sample to known Census 2000 population distributions across our sampling strata. Again, since all sites are chosen with certainty, each site forms a stratum. The adjustments simply comprise the ratio of the site's Asian and Pacific Islander population relative to the total Asian and Pacific Islander population of all sites.¹¹

For individual metropolitan estimates, tests were weighted equally. Given the nature of the population of inference, we chose not to incorporate differential weighting associated with weekly fluctuations of tester productivity and ad volume. Similarly, we do not consider the source of the advertisement when developing weights because no information is available concerning the population of available housing stock that is directly and indirectly represented by these sources.

Field Implementation and Paired Testing Protocols

Phase II of HDS2000 largely adopted the testing procedures and protocols that were implemented in Phase I, making only modest changes based upon problems that arose in our Phase I experience. In Phase II, the Urban Institute designed and deployed a paperless, web-based system for entering, transmitting and managing all testing data. This system—known as

¹¹ In principle, the weights of all sites might be adjusted to account for the fact that Chinese, Koreans, and Southeast Asians are over-represented in the sample, due to the presence of Los Angeles and Minneapolis. However, the over-representation problem could only be corrected by increasing the weights on sites with disproportionately low numbers of Chinese, Koreans, and Southeast Asians, which would potentially bias these results due to over-representation of individual sites. Based on our experience in the 1989 HDS and phase I of HDS 2000, across site differences in treatment appear to dominate across group differences. As a result, we opted to allow each set of tests to simply represent the population tested.

CODE—did not change the testing protocols or field procedures, but it did significantly enhance the speed and reliability of data collection and exchange. Phase II field implementation was managed by Progressive Management Resources (PMR) under the supervision of the Urban Institute’s Director of Field Operations. PMR subcontracted with a local fair housing organization in each metro area to conduct the testing. Staff of these local testing organizations, designated as Test Coordinators, were responsible for the day-to-day testing activities, directing testers and ensuring that tests were completed according to established procedures and protocols. This section describes the field guidelines and procedures implemented in Phase II, including procedures involved in 1) preparing to test, 2) conducting the test, and 3) following the test. Exhibit 2-4 provides a graphic overview of the field implementation procedures for Phase II of HDS2000.

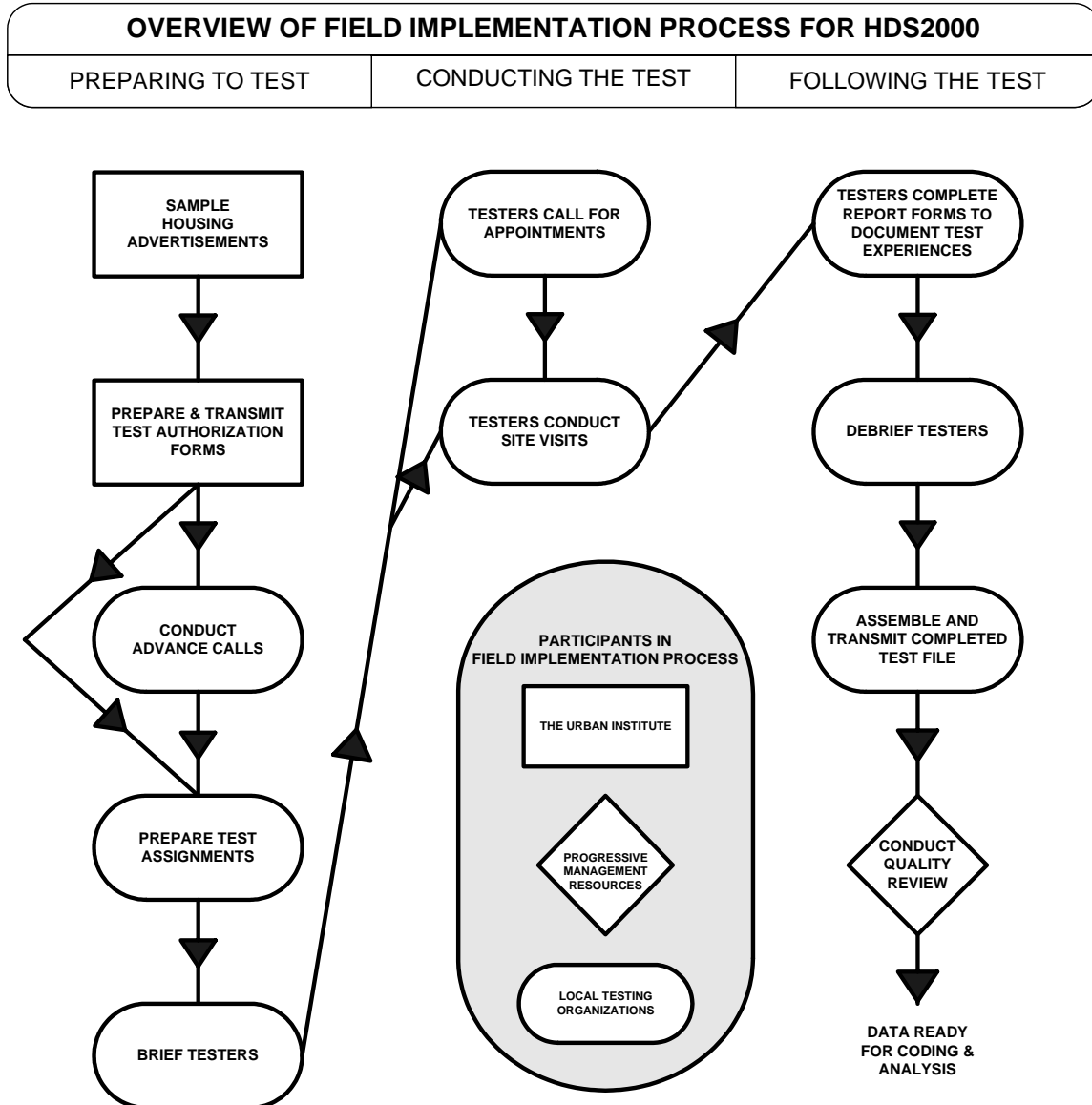
Preparing to Test. For each advertised housing unit selected for testing, Urban Institute staff prepared a Test Authorization Form (TAF), which was transmitted to the local testing organization via the CODE system. Each test was identified by a unique control number, and the TAF specified the parameters of the test structure:

- Transaction Type – the test tenure, whether rental or sales;
- Testing Type – the racial/ethnic group identified for the particular test;
- Required Sequence – the randomly assigned order (minority/non-minority) in which the testers should make their test visits;
- Sales and Rental Information – the type of housing (single-family or condo, furnished or unfurnished) of the advertised unit; and
- Ad Information – the information from the newspaper advertisement (name of paper, edition, location of ad), including ad copy.

Local testing organizations were required to use the TAFs they received each week in order, and to begin by making advance calls both to confirm the eligibility of the advertised units and to obtain information needed to make credible test assignments. Advance calls were made for all rental tests. For sales tests, advance calls were only made when the ad did not state a location of the home, a price for the home, or the number of bedrooms for the home. Advance callers were instructed to obtain specific pieces of information about every advertised unit, such as the exact date of availability (for rentals); the housing price; the number of bedrooms; and the address of the apartment or home. In the case of a rental test, if the advertised unit was no longer available, the advance caller inquired about other units that might be coming available. In order to facilitate the test visits, the advance caller also asked about office hours and whether or not an appointment was needed to view the housing or speak with a housing provider.¹²

¹² Advance callers were required to make at least five attempts to reach a housing provider (calling at different times of the day on different days) before a TAF could be deemed ineligible.

Exhibit 2-4: HDS2000 Field Implementation Overview



Personal, household and financial characteristics, along with a detailed set of instructions, were provided to each tester prior to conducting a test.¹³ Responsibility for developing tester characteristics was shared by the Urban Institute and the Test Coordinators. Test Coordinators developed the tester's personal information, such as their current employer, names of household members, and names of creditors, sometimes using the tester's real characteristics, if appropriate. Extensive training was provided to Test Coordinators on how to assign personal characteristics to testers (e.g., employers and occupations to avoid). Other test characteristics, such as number of bedrooms to request and type of approach, were determined by the Test Coordinator using information obtained during the advance phone call. Financial characteristics assigned to testers and housing requests to be made by testers were automatically assigned by the CODE system, based on the characteristics of the advertised housing unit to be tested:

- minimum number of bedrooms acceptable for the household;
- area or geographic preference;
- reason for moving;
- monthly and annual income for the tester and everyone in the tester's household;
- total household income;
- length of time on the job;
- household assets and debts;
- credit standing; and
- length of time at current residence.

Test Coordinators were required to meet with each tester, individually and in person, prior to a test being conducted. During this initial briefing, the Test Coordinator was responsible for: reviewing the test assignment form with the tester and answering any questions about assigned characteristics, instructions, and/or testing procedures; providing the tester with the appropriate test forms and materials; helping the tester develop a "cheat sheet" for sales tests listing detailed financial information from the Test Assignment form; and reviewing procedures for conducting the test and completing the test report forms. In addition, testers were provided with a detailed set of instructions—or "script"—for every test assignment. These instructions detailed the standard set of tasks testers were expected to accomplish during their test, including how to approach the test site, what questions to ask, and how to end the visit. Annex

¹³ Each tester was provided with only one test assignment at a time and was required to complete that test before receiving another test assignment.

2 provides examples of Test Assignment Forms and the detailed instructions provided to both rental and sales testers.

Conducting the Test. HDS2000 required testers to make appointment calls for all sales tests and some rental tests. On sales tests, testers were not to mention the advertised home during this call and were also to refrain from providing their personal and financial information. Testers were also instructed not to commit to bring certain documents, such as tax returns or pay stubs, nor to agree to meet in advance with a lender to be pre-qualified for mortgage financing. If an agent was reluctant to make an appointment with the tester, perhaps stating that there were regular office hours, the tester could specify with the agent what time he or she planned to arrive during those hours in lieu of an actual appointment. While the standard approach for most rental tests was for the tester to “drop in” rather than making an appointment, appointment calls were required when the sampled advertisement did not provide the location of the available housing, when the advertisement indicated that an appointment was required, or when the advance call indicated that an appointment was required.

During their test visits, testers were trained to inquire about the availability of the advertised housing unit that prompted their visit, similar units (same size and price) that might be available, and other units that might meet their housing needs. They tried to inspect at least three housing units, making return visits or appointments with an agent if necessary, and in sales tests they recorded the address, size, and price of any other units that were recommended to them. In response to questions from the real estate or rental agent, testers provided information about their (assigned) household composition, financial characteristics, employment, and housing needs. They were trained to express no preferences for particular amenities or geographic locations, and they did not submit formal applications, agree to credit checks, or make offers to rent or buy available units. In conjunction with these basic testing protocols, testers were also trained to be convincing in the role of an ordinary homeseeker, obtain as much information as possible from the housing provider about available housing, and take notes in order to remember key information about what occurred during the test and what information was provided by the housing provider.

Following the Test. Following every test visit, each tester was required to complete a set of standardized reporting forms on the CODE system (provided in Annex 2).¹⁴ Test partners did *not* compare their experiences with one another or record any conclusions about differences in treatment; each simply recorded the details of the treatment he or she experienced as an individual homeseeker. The site visit report forms record observations made by the tester and information provided by the housing provider. For sales tests, in addition to a site visit report

¹⁴ Among the advantages of web-based data entry, the CODE system performed basic checks for data completeness and consistency as the data were entered, and made test reports immediately available for quality control reviews by local Test Coordinators and PMR's Regional Coordinators.

form, each tester completed a log of recommended homes. In addition, for a randomly selected sub-set of tests (approximately 10 percent), testers were required to compose test narratives. The test narrative provided a detailed, chronological accounting of the test experience. Testers did not know prior to their conducting a test if a narrative would be required. This served both to ensure that testers were conducting all tests with equal attention to established protocols and procedures, including taking notes, and to ensure against fabrication of tests.

After completing each test, testers were instructed to contact their Test Coordinator in order to arrange for an in-person debriefing. At the debriefing, the Test Coordinator was responsible for collecting all of the completed test forms, as well as any notes or other materials obtained by the tester; reviewing the forms to make sure they were filled out completely; and discussing any concerns the tester may have had about the test or any deviations they may have made from the test assignment or instructions. Many visits to real estate or rental agencies result in follow-up contact, and these contacts were systematically monitored and recorded. All follow-up contacts (including mail as well as telephone calls) were recorded on a Log of Follow-Up Contact, which documented when the follow-up was received, who initiated it, and the nature of the follow-up.

Using Paired Tests to Measure Discrimination

Data from a sample of standardized and consistent paired tests can be combined and analyzed to measure the incidence and forms of discrimination in urban housing markets. The remainder of this chapter describes the statistical techniques used to analyze data from Phase II of HDS2000 at both the national and state level. Specifically, we discuss basic measures of adverse treatment, the challenge of distinguishing systematic discrimination from random differences in treatment, rental and sales treatment indicators, summary indicators, and tests of statistical significance.

Gross and Net Measures. A paired test can result in any one of three basic outcomes for each measure of treatment: 1) the white tester is favored over the minority; 2) the minority tester is favored over the white; or 3) both testers receive the same treatment (which may be either favorable or unfavorable). The simplest measure of adverse treatment is the share of all tests in which the white tester is favored over the minority. This *gross incidence* approach provides very simple and understandable indicators of how often whites are treated more favorably than equally qualified minorities. However, there are instances in which minority testers receive better treatment than their white partners. Therefore, we report both the gross incidence of white-favored treatment and the gross incidence of minority-favored treatment.

Although these simple *gross measures* of white-favored and minority-favored treatment are straightforward and easily understandable, they may overstate the frequency of systematic

discrimination.¹⁵ Specifically, adverse treatment may occur during a test not only because of differences in race or ethnicity, but also because of random differences between the circumstances of their visits to the real estate agency. For example, in the time between two testers' visits, an apartment might have been rented, or the agent may have been distracted by personal matters and forgotten about an available unit. Or one member of a tester pair might meet with an agent who is unaware of some available units. Gross measures of white-favored and minority-favored treatment include some random factors, and therefore provide *upper-bound estimates* of systematic discrimination.¹⁶

One strategy for estimating systematic discrimination, that is, to remove the cases where non-discriminatory random events are responsible for differences in treatment, is to subtract the incidence of minority-favored treatment from the incidence of white-favored treatment to produce a *net measure*. This approach essentially assumes that all cases of minority-favored treatment are attributable to random factors—that systematic discrimination never favors minorities—and that random white-favored treatment occurs just as frequently as random minority-favored treatment. Based on these assumptions, the net measure subtracts differences due to random factors from the total incidence white-favored treatment.

However, it seems unlikely that all minority-favored treatment is the result of random factors; sometimes minorities may be systematically favored on the basis of their race or ethnicity. For example, a minority landlord might prefer to rent to families of his or her own race or a real estate agent might think that minority customers need extra assistance. Other instances of minority-favored treatment might reflect a form of race-based steering, in which white customers are discouraged from considering units in minority neighborhoods or developments. Therefore, the net measure subtracts not only random differences but some systematic differences, and therefore probably understates the frequency of systematic discrimination. Thus, net measures provide *lower-bound estimates* of systematic discrimination,¹⁷ and they reflect the extent to which the differential treatment that occurs (some systematically and some randomly) is more likely to favor whites than minorities.

¹⁵ We use the term “systematic discrimination” to mean differences in treatment that are attributable to a customer’s race or ethnicity, rather than to any other differences in tester characteristics or test circumstances. This term is not the same as “intentional” discrimination, nor is it intended to mean that these differences would necessarily be ruled as violations of federal fair housing law.

¹⁶ Note that it is conceivable that random factors might *reduce* the observed incidence of white-favored or minority-favored treatment, so that the gross-incidence measure is technically not an absolute upper-bound for systematic discrimination.

¹⁷ Even when no statistically significant pattern of race-based differential treatment is observed, individual cases of discrimination may occur. Specifically, even if the net measure is not significantly different zero, there may in fact be instances of race-based discrimination, although the overall pattern does not systematically favor one group over the other. See Annex 3 for a discussion on tests of statistical significance.

It is possible to adapt the basic paired testing methodology to directly observe how often random differences in treatment occur. Specifically, in two metropolitan areas, Phase II of HDS2000 conducted three-part tests. In these tests, a white tester was followed by two minorities or a minority tester was followed by two whites, all following the same protocols. Comparing the treatment of the two same-race testers provides a direct estimate of random (non race-based) differential treatment. This exploratory triad testing effort suggests that most, if not all minority-favored treatment is random; it provides no convincing evidence that minority-favored treatment systematically exceeds differences in the treatment of same-race testers. However, because these results are based on a relatively small number of tests in only two metropolitan areas, they should be viewed as preliminary and require further confirmation.

Rental and Sales Treatment Indicators. A visit with a rental or sales agent is a complex transaction, and may include many forms of favorable or unfavorable treatment. This report presents results for a series of individual treatment indicators that reflect important aspects of the housing transaction. Many, but not all, of these indicators are common to both rental and sales tests. In selecting indicators for analysis, we have focused on forms of treatment that can be unambiguously measured, and appear to have real potential to affect the outcomes of housing search. Ultimately, other analysts may choose to focus on additional or alternative treatment indicators. But the indicators presented here provide a comprehensive overview of the treatment testers received during their visits to real estate and rental agents' offices.¹⁸

Indicators of adverse treatment in rental housing transactions address four critical aspects of the interaction between a renter and a landlord or rental agent. The first group of indicators focuses on the extent to which minority and white partners received comparable information in response to their inquiries about the availability of the advertised housing unit and other similar units that would meet their needs:

- Was the advertised housing unit available?
- Were similar units available?
- How many available units were available?

Testers not only inquired about the availability of housing units, but they also attempted to inspect units that were available for rent. Therefore the next group of treatment indicators

¹⁸ Note that the results presented here do *not* include differences in treatment that testers may have experienced during their appointment calls. Although discrimination may occur at this stage, we are not confident that agents are aware of a tester's race or ethnicity at the time of a telephone call, and therefore have decided to limit our analysis to the in-person visit.

focuses on whether minority and white partners were able to inspect the advertised housing unit and/or other available units:

- Was the advertised unit inspected (if available)?
- Were similar units inspected (if available)?
- How many units were inspected?

The third group of treatment indicators explores potential differences in the costs quoted to minority and white testers for comparable housing:

- How much was the rent for the advertised unit (if available)?¹⁹
- Were rental incentives offered?
- How large a security deposit was required?
- Was an application fee required?²⁰

Finally, the last group of treatment measures for rental tests assesses the extent to which agents encouraged or helped minority and white testers to complete the rental transaction:

- Did the agent make follow-up contact?
- Was the tester asked to complete an application?
- Was the tester told that a credit check was required?²¹
- Were arrangements made for future contact?

Indicators of adverse treatment in sales housing transactions address five critical aspects of the interaction between a homebuyer and a real estate agent. The first group of indicators focuses on the extent to which minority and white partners received comparable information in response to their inquiries about the availability of the advertised home and other similar homes that would meet their needs:

- Was the advertised housing unit available?

¹⁹ For both rent and security deposit, we performed a manual match of addresses to confirm that the units seen by the white and minority partners were on the same street, in the same building, or were the same unit. Results were robust to this check. Any difference in dollar amounts between the white and minority tester was counted as a difference in treatment.

²⁰ Requiring an application fee from one tester but not the other is viewed as unfavorable treatment because it raises the cost of housing search.

²¹ This indicator was not included in Phase I because the information needed to construct it was not available for HDS 1989.

- Were similar units available?
- How many units were available?

Testers not only inquired about the availability of homes, but they also attempted to inspect homes that were available. Therefore the next group of treatment indicators focuses on whether minority and white partners were able to inspect the advertised home and/or other available homes:

- Was the advertised unit inspected (if available)?
- Were similar units inspected (if available)?
- How many units were inspected?

The third group of treatment indicators explores potential differences in the neighborhoods where homes were made available for minority and white homebuyers:²²

- Average percent white for neighborhoods where recommended homes were located.
- Average percent white for neighborhoods where inspected homes were located.

Real estate agents can play an important role in helping homebuyers learn about mortgage financing options. Therefore, the fourth group of sales treatment indicators assesses the assistance agents provided to minority and white homebuyers:

- Was help with financing offered?
- Did the agent “pre-qualify” the tester for mortgage financing?
- Were specific lenders recommended?

Finally, the last group of treatment measures for sales tests assesses the extent to which agents encouraged or helped minority and white testers to complete the sales transaction:

- Did the agent make follow-up contact?
- Was the tester told that he or she must be pre-qualified before seeing an agent?²³
- Was the tester told he or she was qualified to buy a home?
- Were arrangements made for future contacts?

²² A difference in the average racial or ethnic composition of neighborhoods for white and minority testers was only counted as a difference in treatment if it exceeded 5 percentage points.

²³ This indicator was not included in Phase I because the information needed to construct it was not available for HDS 1989.

Summary Indicators. In addition to presenting results for all of the individual treatment indicators discussed above, this report combines these individual indicators to create *composite measures* for categories of treatment (such as housing availability or housing costs) as well as for the transaction as a whole.²⁴ The first type of composite classifies tests as white-favored if the white tester received favorable treatment on one or more individual items, while his or her minority partner received *no* favorable treatment. Tests are classified as “neutral” if one tester was favored on some individual treatment items and his or her partner was favored on even one item. This approach has the advantage that it identifies tests where one partner was unambiguously favored over the other. But it may incorrectly classify tests as neutral when one tester received favorable treatment on several items, while his or her partner was favored on only one. This approach also classifies tests as neutral if one tester was favored on the most important item while his or her partner was favored on items of lesser significance. Therefore, it may understate the overall incidence of differential treatment across indicators, but nonetheless provides a very useful measure of the *consistency* of adverse treatment.

In addition to the consistency approach, *hierarchical* composites were constructed by considering the relative importance of individual treatment measures to determine whether one tester was favored over the other. For each category of treatment measures (and for the overall test experience), a hierarchy of importance was established *independent* of analysis of the testing results. For example, in the *availability* category, if the white tester was told that the advertised home was available, while the minority was told it was no longer available, then the white tester was deemed to be favored overall, even if the minority was favored on less important items. Exhibit 2-5 presents the decision rules used to create composite measures of differential treatment for both rental and sales tests. The hierarchical composites offer the advantage of reflecting important differences in the treatment of minorities and whites. But because random differences on a single treatment indicator may cause a test to be classified as white-favored or minority-favored, the gross hierarchical composite measures may over-state the incidence of systematic discrimination. Therefore, we present both *consistency* composites and *hierarchical* composites for the overall testing experience.

²⁴ Again, it is important to emphasize the difference between methods used for the statistical analysis of paired testing results and methods used to assemble or assess evidence of unlawful conduct in an individual case. No pre-determined set of decision criteria can substitute for case-by-case judgments about test results.

Exhibit 2-5: Construction of Hierarchical Composites

Advertised Unit Available?	1
Similar Units Available?	2
Number of Units Available	3
Advertised Unit Inspected?	1
Similar Units Inspected?	2
Number of Units Inspected	3
Rent for Advertised Unit	1
Rental Incentives Offered?	2
Amount of Security Deposit	3
Application Fee Required?	4
Follow-up Contact from Agent?	1
Asked to Complete Application?	2
Credit Check Required?	3
Arrangements for Future?	4
Advertised Unit Available?	1
Advertised Unit Inspected?	2
Rent for Advertised Unit	3
Similar Units Available?	4
Similar Units Inspected?	5
Number of Units Recommended	6
Number of Units Inspected	7
Rental Incentives Offered?	8
Amount of Security Deposit	9
Application Fee Required?	10
Follow-up Contact from Agent?	11
Asked to Complete Application?	12
Credit Check Required?	13
Arrangements for Future?	14

Advertised Unit Available?	1
Similar Units Available?	2
Number of Units Available	3
Advertised Unit Inspected?	1
Similar Units Inspected?	2
Number of Units Inspected	3
Steering – Homes Recommended	-
Steering – Homes Inspected	-
Help with Financing Offered?	1
Agent Pre-Qualified Tester?	2
Lenders Recommended?	3
Follow-up Contact from Agent?	1
Pre-Qualification Required?	2
Told Qualified to Buy?	3
Arrangements for Future?	4
Advertised Unit Available?	1
Advertised Unit Inspected?	2
Similar Units Available	3
Similar Units Inspected?	4
Steering – Homes Recommended	5
Number of Units Recommended	6
Steering – Homes Inspected	7
Number of Units Inspected	8
Help with Financing Offered?	9
Agent Pre-Qualified Tester?	10
Lenders Recommended?	11
Follow-up Contact from Agent?	12
Pre-Qualification Required?	13
Told Qualified to Buy?	14
Arrangements for Future?	15

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3. NATIONAL ESTIMATES OF DISCRIMINATION AGAINST ASIANS AND PACIFIC ISLANDERS

The primary goal of the second phase of testing conducted under HDS2000 was to produce the first rigorous estimates of discrimination against Asians and Pacific Islanders seeking housing in urban housing markets nationwide. This chapter presents these national estimates, focusing first on rental tests and then on sales tests. For each category of treatment indicators discussed in chapter 2, we present both gross and net measures of differential treatment, and compare patterns of discrimination against Asians and Pacific Islanders to the national estimates of discrimination against African Americans and Hispanics that were produced in Phase I of HDS2000. This chapter also presents state-wide estimates of discrimination against Asians and Pacific Islanders seeking housing in metropolitan California. Chapter 4 explores potential variations in adverse treatment for Asians and Pacific Islanders of different national origin and with different skin color. Annex 4 provides estimates of adverse treatment against Asians and Pacific Islanders for Los Angeles and Minneapolis, the two metropolitan areas with sample sizes large enough to support metropolitan-level results.

Rental Testing Results

During the summer and fall of 2001, 255 API/white rental tests were conducted in a sample of 9 large metropolitan areas with significant Asian and Pacific Islander populations. These tests are combined with 226 API/white rental tests conducted in Los Angeles and Minneapolis during the summer and fall of 2000 to provide representative estimates of discrimination against Asian and Pacific Islander renters in large metro areas nationwide.

Housing Availability. Asians and Pacific Islanders seeking rental housing do not appear to face systematic discrimination with respect to housing availability (see Exhibit 3-1). Although some differential treatment did occur in the availability of advertised and similar units, these differences were just as likely to favor the Asian and Pacific Islander tester as to favor the white.

Exhibit 3-1: Differential Treatment for Housing Availability, API/White Rental Tests

HOUSING AVAILABILITY	Differential Treatment in 2001		
	% white favored	% API favored	net measure
Advertised unit available?	7.2%	7.6%	-0.4%
Similar units available?	11.2%	11.0%	0.2%
Number units recommended	25.6%	21.7%	3.9%
Overall availability	28.8%	24.0%	4.8%

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Housing Inspections. In contrast, Asian and Pacific Islander renters appear to receive significantly *more favorable* treatment than comparable whites with respect to housing inspections (see Exhibit 3-2). In 10.9 percent of tests, only the Asian or Pacific Islander was able to inspect the advertised unit (compared to 6.9 percent in which the white tester was favored). Overall, Asians and Pacific Islanders were favored on housing inspections in 20.0 percent of tests, compared to only 14.6 percent in which whites were favored. Net measures reflect statistically significant treatment *in favor of Asians and Pacific Islanders* for opportunities to inspect the advertised unit (4.0 percent) and the overall inspections indicator (5.3 percent).

Exhibit 3-2: Differential Treatment for Housing Inspections, API/White Rental Tests

HOUSING INSPECTION	Differential Treatment in 2001		
	% white favored	% API favored	net measure
Advertised unit inspected?	6.9%	10.9%	-4.0% *
Similar units inspected?	6.7%	6.5%	0.2%
Number units inspected	12.9%	17.7%	-4.8%
Overall inspection	14.6%	20.0%	-5.3% *

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Housing Costs. Neither Asians and Pacific Islanders nor whites are systematically favored with respect to any indicators of rental housing costs (see Exhibit 3-3). None of the indicators in this category reflects treatment that significantly favors either whites or Asians and Pacific Islanders, and whites are no more likely to be favored than Asians and Pacific Islanders on the overall composite indicator for this category of treatment.

Exhibit 3-3: Differential Treatment for Housing Costs, API/White Rental Tests

HOUSING COST	Differential Treatment in 2001		
	% white favored	% API favored	net measure
Rent for advertised unit	10.1%	8.9%	1.2%
Rental incentives offered?	9.1%	5.8%	3.3%
Amount of security deposit	7.3%	10.1%	-2.8%
Application fee required?	8.4%	9.7%	-1.3%
Overall cost	18.5%	19.9%	-1.4%

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Agent Encouragement. Asians and Pacific Islanders and whites appear to experience a mixed pattern of treatment with respect to encouragement and assistance from rental agents (see Exhibit 3-4). Whites are significantly more likely than comparable Asians and Pacific Islanders to receive some form of follow-up contact (4.9 percent white-favored, compared to 1.7 percent Asian and Pacific Islander-favored). But Asians and Pacific Islanders are significantly less likely to be told that a credit check is required (22.5 percent Asian and Pacific Islander-favored, compared to 13.0 percent white-favored). And whites receive significantly more favorable treatment with respect to arrangements for future contact (20.0 percent white-favored, compared to 12.5 percent Asian and Pacific Islander-favored). As a result of this mixed pattern, the overall indicator reflects a high level of differential treatment on agent encouragement, but these differences are no more likely to favor whites than to favor Asians and Pacific Islanders.

Exhibit 3-4: Differential Treatment for Agent Encouragement, API/White Rental Tests

AGENT ENCOURAGEMENT	Differential Treatment in 2001		
	% white favored	% API favored	net measure
Follow-up contact from agent?	4.9%	1.7%	3.2% **
Asked to complete application?	18.6%	19.1%	-0.4%
Credit check required?	13.0%	22.5%	-9.5% **
Arrangements for future?	20.0%	12.5%	7.5% **
Overall encouragement	38.9%	36.6%	2.3%

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Summary Indicators. Overall, white renters were *consistently favored* over comparable Asians and Pacific Islanders in 21.5 percent of tests (see Exhibit 3-5). However, the hierarchical composite indicator shows that white renters were not significantly more likely to be favored overall than were Asians and Pacific Islanders, largely because of the mixed pattern of treatment described above, in which whites were favored on some indicators, while Asians and Pacific Islanders were favored on others.

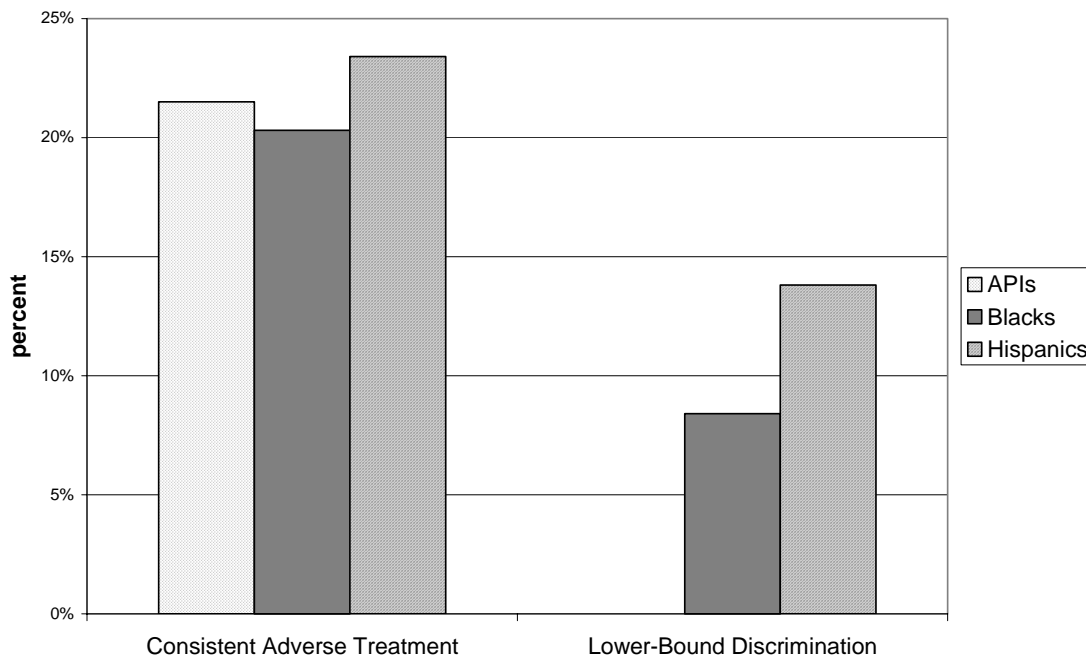
Exhibit 3-5: Summary Indicators of Differential Treatment, API/White Rental Tests

SUMMARY MEASURES	Differential Treatment in 2001		
	% white favored	% API favored	net measure
Hierarchical	47.8%	43.4%	4.3%
Consistency	21.5%	17.4%	4.0%

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

The overall level of *consistent* unfavorable treatment experienced by Asian and Pacific Islander renters is comparable to the level for African American renters and Hispanic renters (see Exhibit 3-6).¹ As discussed earlier, patterns of differential treatment are much more mixed for Asian and Pacific Islander renters than for either blacks or Hispanics. Specifically, black renters experience systematic discrimination in housing availability and inspections, while Hispanics experience systematic discrimination in availability, inspections, and housing costs. In contrast, Asians and Pacific Islanders do not appear to experience systematic discrimination for any of the indicators but actually appear to be systematically favored for inspections. As a result of this mixed pattern, the overall lower-bound estimate of discrimination is not statistically significant for Asians and Pacific Islanders, while it is for both African Americans and Hispanics.

Exhibit 3-6: Discrimination Against API, Black, and Hispanic Renters



¹ Note that the 4.3 percent net estimate for Asians and Pacific Islanders does not appear on this chart because it is not significantly different from zero. The national estimates for African American and Hispanic renters that are reported in Exhibit 3-6 differ slightly from those reported in Phase I. They are updated to include rental tests conducted in Baltimore and Miami and to incorporate the revised treatment measures presented in chapter 2. Annex 6 compares API test results to black and Hispanic results for comparable sub-samples of sites. These comparisons (which control for differences in the sites where testing was conducted for different groups) provide the most rigorous basis for assessing the relative magnitude of discrimination against Asians and Pacific Islanders, blacks, and Hispanics.

Sales Testing Results

During the summer and fall of 2001, 250 API/white sales tests were conducted in a representative sample of 9 large metropolitan areas with significant Asian and Pacific Islander populations. These tests are combined with 158 API/white sales tests conducted in Los Angeles and Minneapolis, during the summer and fall of 2000, to provide representative estimates of discrimination against Asian and Pacific Islander homebuyers in large metro areas nationwide.

Housing Availability. Asian and Pacific Islander homebuyers frequently receive less information about available homes than comparable whites (see Exhibit 3-7). Whites were no more likely than comparable Asian and Pacific Islander homebuyers to be told that the advertised home was available. But whites were significantly more likely to be told about similar units that met their housing needs. Specifically, white were told about similar units while their Asian or Pacific Islander partners were not in 17.5 percent of tests, while Asians and Pacific Islanders were favored on this indicator in only 11.0 percent of tests. Moreover, white homebuyers learned about more available units than their Asian or Pacific Islander partners in 46.3 percent of tests, while Asians and Pacific Islanders learned about more units in only 36.8 percent. Overall, whites received favorable treatment with respect to housing availability in 49.3 percent of tests, compared to only 38.6 percent in which Asians and Pacific Islanders were favored. Lower-bound (net) estimate of discrimination against Asians and Pacific Islanders were statistically significant for the availability of similar units (6.6 percent), the number of units recommended (9.5 percent), and the overall availability indicator (10.7 percent).

Exhibit 3-7: Differential Treatment for Housing Availability, API/White Sales Tests

HOUSING AVAILABILITY	Differential Treatment in 2001		
	% white favored	% API favored	net measure
Advertised unit available?	15.6%	14.6%	1.0%
Similar units available?	17.5%	11.0%	6.6% **
Number units recommended	46.3%	36.8%	9.5% *
Overall availability	49.3%	38.6%	10.7% **

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Housing Inspections. Asian and Pacific Islander homebuyers also face high levels of adverse treatment with respect to housing inspections (see Exhibit 3-8). For every indicator in this category, the incidence of white-favored treatment significantly exceeds the incidence of Asian and Pacific Islander-favored treatment. White testers were able to inspect the advertised unit while their Asian and Pacific Islander partners were not in 16.7 percent of tests, compared

to 10.9 percent in which Asians and Pacific Islanders were favored. White testers were able to inspect similar units while their Asian and Pacific Islander partners were not in 21.4 percent of tests, compared to 11.9 percent in which Asians and Pacific Islanders were favored. And whites inspected more units than their Asian and Pacific Islander partners in 45.7 percent of tests, compared to only 31.7 percent in which Asians and Pacific Islanders inspected more units. Overall, white-favored treatment on housing inspections occurred in half the tests (50.7 percent), while Asians and Pacific Islanders were favored in 31.9 percent. The lower-bound (net) measures of discrimination against Asians and Pacific Islanders were statistically significant for all indicators, and reached 18.8 percent for the composite indicator.

Exhibit 3-8: Differential Treatment for Housing Inspections, API/White Sales Tests

HOUSING INSPECTION	Differential Treatment in 2001		
	% white favored	% API favored	net measure
Advertised unit inspected?	16.7%	10.9%	5.7% **
Similar units inspected	21.4%	11.9%	9.4% **
Number units inspected	45.7%	31.7%	14.0% **
Overall inspection	50.7%	31.9%	18.8% **

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Geographic Steering. Asian and Pacific Islander homebuyers do not appear to face statistically significant levels of geographic steering (see Exhibit 3-9). Whites were not significantly more likely than comparable Asians and Pacific Islanders to be recommended or shown homes in predominantly white neighborhoods.

Exhibit 3-9: Differential Treatment for Geographic Steering, API/White Sales Tests

GEOGRAPHIC STEERING	Differential Treatment in 2001		
	% white favored	% API favored	net measure
Steering - homes recommended	18.4%	16.3%	2.1%
Steering - homes inspected	15.1%	14.8%	0.3%

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Financing Assistance. Asians and Pacific Islanders do face significant adverse treatment in assistance with mortgage financing (see Exhibit 3-10). Agents were more likely to offer to help white homebuyers with financing. Specifically, financing help was offered to whites but not their Asian and Pacific Islander partners in 28.5 percent of tests, while Asians and

Pacific Islanders were favored in this regard in only 13.5 percent of tests. Overall, whites received more favorable treatment on help with financing in 43.6 percent of tests, while Asians and Pacific Islanders were favored in 28.3 percent. Lower-bound (net) estimates of discrimination against Asians and Pacific Islanders were statistically significant for offers of help with financing (15.1 percent) and the overall composite (15.3 percent).

Exhibit 3-10: Differential Treatment for Financing Assistance, API/White Sales Tests

FINANCING ASSISTANCE	Differential Treatment in 2001		
	% white favored	% API favored	net measure
Help with financing offered?	28.5%	13.5%	15.1% **
Agent prequalified tester?	22.8%	18.4%	4.4%
Lenders recommended?	19.7%	14.4%	5.3%
Overall financing	43.6%	28.3%	15.3% **

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Agent Encouragement. Whites received more encouragement and assistance than Asians and Pacific Islanders in some respects and were significantly more likely to be favored overall (see Exhibit 3-11). In 14.0 percent of tests, Asians and Pacific Islanders were told that they must be pre-qualified, while comparable whites were not (compared to 5.8 percent Asian and Pacific Islander-favored). And in 23.6 percent of tests, the agent told white testers but not Asians and Pacific Islanders that they were qualified to purchase a home (compared to 14.2 percent Asian and Pacific Islander-favored). The net measures for these two indicators are statistically significant, at 8.1 percent and 9.4 percent, respectively. The overall composite indicator for this category reflects a statistically significant pattern of white-favored treatment with its lower-bound (net) estimate of discrimination at 7.7%.

Exhibit 3-11: Differential Treatment for Agent Encouragement, API/White Sales Tests

AGENT ENCOURAGEMENT	Differential Treatment in 2001		
	% white favored	% API favored	net measure
Follow-up contact from agent?	12.6%	13.1%	-0.5%
Prequalification required?	14.0%	5.8%	8.1% **
Told qualified?	23.6%	14.2%	9.4% **
Arrangements for future?	11.7%	8.7%	2.9%
Overall encouragement	39.6%	31.9%	7.7% *

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Summary Indicators. Overall, white homebuyers were consistently favored over comparable Asians and Pacific Islanders in 20.4 percent of tests (see Exhibit 3-12). Moreover, the hierarchical composite indicates that white homebuyers were favored in 58.7 percent of tests, while Asians and Pacific Islanders were favored in only 39.2 percent. The resulting lower-bound (net) estimate of overall discrimination against Asians and Pacific Islanders is statistically significant at 19.6 percent.

Exhibit 3-12: Summary Measures of Differential Treatment, API/White Sales Tests

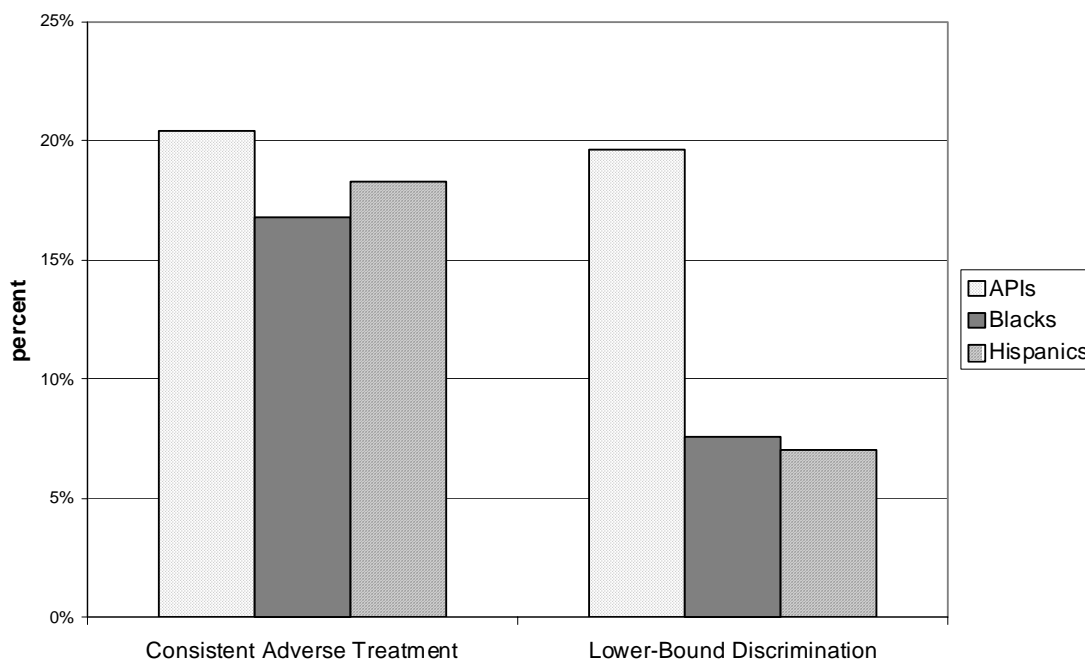
SUMMARY MEASURES	Differential Treatment in 2001		
	% white favored	% API favored	net measure
Hierarchical	58.7%	39.2%	19.6% **
Consistency	20.4%	8.6%	11.8% **

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

The overall level of discrimination against Asian and Pacific Islander homebuyers is comparable to the level of discrimination against African Americans, and significantly higher than the level of discrimination against Hispanic homebuyers (see Exhibit 3-13).² As discussed above, Asians and Pacific Islanders appear to face systematic discrimination in housing availability, inspections, financing assistance, and agent encouragement but not geographic steering. African American homebuyers, on the other hand, face systematic discrimination in housing inspections, geographic steering, financing assistance, and agent encouragement, while Hispanics face systematic discrimination only in geographic steering and financing assistance.

² The national estimates for African American and Hispanic homebuyers that are reported in Exhibit 3-13 differ slightly from those reported in Phase I. They are updated to include sales tests conducted in Baltimore and Miami and to incorporate the revised treatment measures presented in chapter 2. Annex 6 compares API test results to black and Hispanic results for comparable sub-samples of sites. These comparisons (which control for differences in the sites where testing was conducted for different groups) provide the most rigorous basis for assessing the relative magnitude of discrimination against Asians and Pacific Islanders, blacks, and Hispanics.

Exhibit 3-13: Discrimination Against API, Black, and Hispanic Homebuyers



Because the composition and history of Honolulu’s Asian and Pacific Islander population differs quite substantially from metro areas in the mainland U.S., we explored the possibility that levels or patterns of discrimination might be different when Honolulu was excluded from the analysis. In general, however, estimates are the same for the mainland metro areas as for the nation as a whole. The only exception is that Asian and Pacific Islander renters are no longer systematically favored over whites on housing inspections when Honolulu is excluded from the analysis. Annex 5 presents results for the mainland metro areas.

Discrimination Against Asians and Pacific Islanders in California

During the summer and fall of 2000 and 2001, 280 Asian and Pacific Islander rental tests and 270 Asian and Pacific Islander sales tests were conducted in six California metropolitan areas. In 2000, as part of Phase I of HDS2000, 149 rental tests and 142 sales tests were conducted in Los Angeles. In 2001, an additional 131 rental 128 sales tests were conducted in Anaheim/Santa Ana, Oakland, San Diego, San Francisco, and San Jose.

Rental Testing. In general, Asians and Pacific Islanders seeking rental housing in metropolitan areas of California are not treated significantly differently from comparable white renters (see Exhibit 3-14). For all four categories of treatment, the lower-bound (net) estimates of systematic discrimination are not significantly different from zero. And, although the overall

incidence of consistent white-favored treatment is 22.5 percent, the overall composite indicator suggests that differential treatment is no more likely to favor whites than to favor Asians and Pacific Islanders.

Only two individual indicators reflect systematic differences in treatment for Asians and Pacific Islanders in California’s metropolitan rental markets. Rental agents were more likely to offer favorable rental incentives to whites than to comparable Asians and Pacific Islanders (9.5 percent white-favored versus 4.4 percent Asian and Pacific Islander-favored). However, rental agents were more likely to tell whites that a credit check would be required (13.2 percent white-favored compared to 21.6 percent Asian and Pacific Islander-favored).

Exhibit: 3-14 Differential Treatment for Asian and Pacific Islander Renters, California

TREATMENT MEASURES	California			National		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit available?	5.9%	7.7%	-1.8%	7.2%	7.6%	-0.4%
Similar units available?	9.9%	12.4%	-2.5%	11.2%	11.0%	0.2%
Number units recommended	17.5%	20.5%	-3.0%	25.6%	21.7%	3.9%
Overall availability	19.4%	23.8%	-4.4%	28.8%	24.0%	4.8%
Advertised unit inspected?	9.7%	11.3%	-1.6%	6.9%	10.9%	-4.0% *
Similar units inspected	6.7%	5.3%	1.5%	6.7%	6.5%	0.2%
Number units inspected	14.3%	14.0%	0.3%	12.9%	17.7%	-4.8%
Overall inspection	15.1%	17.8%	-2.7%	14.6%	20.0%	-5.3% *
Rent for advertised unit	11.3%	13.0%	-1.8%	10.1%	8.9%	1.2%
Rental incentives offered?	9.5%	4.4%	5.1% *	9.1%	5.8%	3.3%
Amount of security deposit	7.4%	12.1%	-4.7%	7.3%	10.1%	-2.8%
Application fee required?	9.4%	9.2%	0.3%	8.4%	9.7%	-1.3%
Overall cost	22.4%	21.0%	1.4%	18.5%	19.9%	-1.4%
Follow-up contact from agent?	4.1%	2.2%	2.0%	4.9%	1.7%	3.2% **
Asked to complete application?	19.3%	17.6%	1.7%	18.6%	19.1%	-0.4%
Credit check required?	13.2%	21.6%	-8.4% **	13.0%	22.5%	-9.5% **
Arrangements for future?	18.6%	14.6%	4.0%	20.0%	12.5%	7.5% **
Overall encouragement	39.2%	36.9%	2.3%	38.9%	36.6%	2.3%
Overall hierarchical	44.5%	46.1%	-1.6%	47.8%	43.4%	4.3%
Overall consistency	22.5%	20.1%	2.3%	21.5%	17.4%	4.0%

Note: For net estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Sales Testing. Asian and Pacific Islander homebuyers in metropolitan California experience systematic discrimination on housing availability, housing inspection, assistance with financing, and the overall composite measure (see Exhibit 3-15). Overall, white homebuyers in California were systematically favored over comparable Asians and Pacific Islanders in more than half of tests (59.4 percent) while Asians and Pacific Islanders are favored in only 39.8 percent. Consequently, the lower-bound (net) estimate of systematic discrimination against Asians and Pacific Islanders for the overall composite measure is statistically significant at 19.6 percent.

With respect to housing availability, Asians and Pacific Islanders received significantly less information on the availability of similar units and were told about fewer available units than comparable white homebuyers. Whites were favored on housing availability in 55.9 percent of tests, compared to only 36.9 percent Asian and Pacific Islander-favored, for the lower-bound (net) estimate of 19.0 percent systematic discrimination.

Asians and Pacific Islanders experienced systematic adverse treatment for all the housing inspection indicators. Specifically, they were less likely than comparable white homebuyers to be able to inspect either the advertised unit or similar units, and whites were able to inspect significantly more available units. Overall, whites received favorable treatment with respect to housing inspections in 56.8 percent of tests, compared to only 30.6 percent of tests in which Asians and Pacific Islanders were favored, resulting in a statistically significant net measure of 26.2 percent.

Real estate agents were more likely to offer help with financing to white homebuyers than to comparable Asians and Pacific Islanders (32.5 white-favored compared to 8.6 percent Asian and Pacific Islander-favored). They were also more willing to prequalify whites than Asians and Pacific Islanders (29.5 percent white-favored compared to 16.4 percent Asian and Pacific Islander-favored). The lower-bound (net) estimates of discrimination on these indicators are 23.9 percent and 13.1 percent respectively, yielding a statistically significant 23.9 percent net composite indicator for financing assistance.

Finally, sales agents were more likely to provide two forms of encouragement to whites than to Asians and Pacific Islanders. Specifically, Asians and Pacific Islanders were more likely to be told that prequalification would be required (16.8 percent white-favored compared to 7.8 percent Asian and Pacific Islander-favored), and whites were more likely to be told that they were qualified to buy (29.8 percent white-favored compared to 14 percent Asian and Pacific Islander-favored). The lower-bound (net) estimates of discrimination for these two indicators are statistically significant at 9 percent and 15.8 percent respectively. However, the overall composite indicator for this category of treatment suggests that whites are not systematically more likely than Asians and Pacific Islanders to be favored.

Exhibit 3-15: Differential Treatment for Asian and Pacific Islander Homebuyers, California

TREATMENT MEASURES	California			National		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit available?	17.1%	13.3%	3.8%	15.6%	14.6%	1.0%
Similar units available?	18.8%	9.0%	9.8% **	17.5%	11.0%	6.6% **
Number units recommended	51.2%	35.5%	15.7% **	46.3%	36.8%	9.5% *
Overall availability	55.9%	36.9%	19.0% **	49.3%	38.6%	10.7% **
Advertised unit inspected?	17.6%	8.9%	8.7% **	16.7%	10.9%	5.7% **
Similar units inspected?	23.1%	13.3%	9.8% **	21.4%	11.9%	9.4% **
Number units inspected	49.8%	31.8%	18.0% **	45.7%	31.7%	14.0% **
Overall inspection	56.8%	30.6%	26.2% **	50.7%	31.9%	18.8% **
Steering - homes recommended	21.9%	21.3%	0.6%	18.4%	16.3%	2.1%
Steering - homes inspected	19.9%	19.4%	0.6%	15.1%	14.8%	0.3%
Help with financing offered?	32.5%	8.6%	23.9% **	28.5%	13.5%	15.1% **
Agent prequalified tester?	29.5%	16.4%	13.1% **	22.8%	18.4%	4.4%
Lenders recommended?	19.6%	17.2%	2.4%	19.7%	14.4%	5.3%
Overall financing	49.8%	25.8%	23.9% **	43.6%	28.3%	15.3% **
Follow-up contact from agent?	10.9%	12.8%	-1.9%	12.6%	13.1%	-0.5%
Prequalification required?	16.8%	7.8%	9.0% **	14.0%	5.8%	8.1% **
Told qualified?	29.8%	14.0%	15.8% **	23.6%	14.2%	9.4% **
Arrangements for future?	12.5%	9.9%	2.5%	11.7%	8.7%	2.9%
Overall encouragement	40.8%	33.7%	7.1%	39.6%	31.9%	7.7% *
Overall hierarchical	59.4%	39.8%	19.6% **	58.7%	39.2%	19.6% **
Overall consistency	19.8%	6.9%	12.9% **	20.4%	8.6%	11.8% **

Note: For net estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

3.	NATIONAL ESTIMATES OF DISCRIMINATION AGAINST ASIANS AND PACIFIC 1	
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4. VARIATIONS IN DISCRIMINATION AGAINST ASIANS AND PACIFIC ISLANDERS

The Asian and Pacific Islander population in the metropolitan United States is tremendously diverse, and levels or patterns of discrimination may vary across sub-groups. For example, it seems possible that darker-skinned Asians and Pacific Islanders may experience higher levels of adverse treatment than lighter-skinned people, and that ethnic groups that are newer to the U.S. may experience higher levels of adverse treatment than those that have lived here longer. As discussed in chapter 2, a variety of Asian and Pacific Islander testers were recruited to participate in this phase of HDS2000 in order to reflect the diversity of the population in each sampled metropolitan area. However, because of the large number of ethnic groups and the modest overall sample size, our ability to test for differences in patterns of discrimination is limited. This chapter explores the question by comparing estimates of adverse treatment for light-skinned Asians and Pacific Islanders to estimates for dark-skinned people.¹ In addition, because Phase II of HDS2000 expanded the sample of advertised sources, we test for differences between units advertised in major metropolitan newspapers (the source used exclusively in Phase I) and those advertised in other sources.

Differences Based on Skin Color

We find little consistent support for the hypothesis that dark-skinned Asians and Pacific Islanders experience higher levels of adverse treatment in metropolitan housing markets than light-skinned Asians and Pacific Islanders. Overall composite measures of consistent adverse treatment and systematic discrimination do not differ significantly based on skin color for either rental or sales tests. Differences are statistically significant for some individual treatment indicators, however, and these results suggest that patterns of treatment may be quite different for renters than for homebuyers.

Among renters, several individual treatment measures indicate that (as hypothesized) dark-skinned Asians and Pacific Islanders experience more discrimination than light-skinned Asians and Pacific Islanders (see Exhibit 4-1). Specifically, the lower-bound (net) estimates of systematic discrimination are significantly higher for dark-skinned testers for availability of the advertised unit, overall unit availability, and follow-up contact from the agent.

¹ Local testing organizations provided photographs for all testers participating in HDS2000. Based on these photographs, each tester's skin tone was rated on a scale of one to five (palest to darkest) by at least two independent coders.

Exhibit 4-1: Differential Treatment for Asian and Pacific Islander Renters by Skin Tone

HOUSING AVAILABILITY	Dark-Skinned			Light-Skinned			Diff from Dark-Skinned		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit available?	8.3%	4.9%	3.4%	3.1%	8.1%	-5.0% *	5.2%	-3.2%	8.4% *
Similar units available?	13.3%	9.4%	3.9%	8.6%	11.1%	-2.5%	4.7%	-1.7%	6.4%
Number units recommended	25.1%	23.8%	1.4%	19.4%	24.4%	-5.1%	5.8%	-0.7%	6.4%
Overall availability	31.1%	22.2%	8.9%	19.5%	29.0%	-9.5%	11.6% **	-6.8%	18.4% **
HOUSING INSPECTION	Dark-Skinned			Light-Skinned			Diff from Dark-Skinned		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit inspected?	8.0%	6.4%	1.6%	5.3%	9.5%	-4.2%	2.7%	-3.1%	5.8%
Similar units inspected?	5.3%	8.1%	-2.8%	6.6%	4.1%	2.5%	-1.3%	4.0%	-5.3%
Number units inspected	10.9%	19.7%	-8.7% **	12.9%	12.6%	0.3%	-2.0%	7.1% *	-9.1%
Overall inspection	14.6%	19.8%	-5.2%	13.2%	15.7%	-2.6%	1.4%	4.1%	-2.7%
HOUSING COST	Dark-Skinned			Light-Skinned			Diff from Dark-Skinned		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Rent for advertised unit	9.0%	13.1%	-4.1%	9.8%	11.4%	-1.6%	-0.8%	1.7%	-2.5%
Rental incentives offered?	6.3%	4.5%	1.8%	8.5%	4.9%	3.6%	-2.2%	-0.4%	-1.8%
Amount of security deposit	3.2%	14.1%	-10.9% **	9.9%	13.5%	-3.6%	-6.7% *	0.6%	-7.3%
Application fee required?	5.9%	10.5%	-4.6%	9.3%	8.4%	0.9%	-3.4%	2.1%	-5.5%
Overall cost	15.4%	21.0%	-5.6%	17.2%	19.6%	-2.4%	-1.8%	1.4%	-3.2%
AGENT ENCOURAGEMENT	Dark-Skinned			Light-Skinned			Diff from Dark-Skinned		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Follow-up contact from agent?	7.0%	0.3%	6.7% **	3.6%	2.2%	1.5%	3.4%	-1.8%	5.2% *
Asked to complete application?	20.1%	20.9%	-0.8%	22.1%	16.2%	5.9%	-2.0%	4.7%	-6.7%
Credit check required?	15.3%	21.1%	-5.7%	10.1%	24.1%	-14.0% **	5.2%	-3.1%	8.3%
Arrangements for future?	21.4%	10.7%	10.7% **	19.1%	10.3%	8.8% **	2.3%	0.4%	1.9%
Overall encouragement	39.8%	36.0%	3.8%	40.9%	30.6%	10.3%	-1.1%	5.4%	-6.5%
SUMMARY MEASURES	Dark-Skinned			Light-Skinned			Diff from Dark-Skinned		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Hierarchical	49.2%	43.4%	5.8%	38.0%	46.4%	-8.5%	11.2% **	-3.1%	14.2%
Consistency	21.0%	21.5%	-0.4%	21.5%	15.0%	6.5%	-0.4%	6.5%	-6.9%

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

However, for sales tests, when differences are statistically significant, they suggest that dark-skinned Asians and Pacific Islanders experience *less* discrimination than light-skinned Asians and Pacific Islanders (see Exhibit 4-2). The lower-bound (net) estimates of systematic discrimination are significantly *lower* for dark-skinned testers for overall availability, number of units inspected, geographic steering, offers of help with financing, offers to pre-qualify, and statements that the tester is qualified to buy. Only one measure – follow-up contact from the agent – reflects a higher level of discrimination against dark-skinned Asians and Pacific Islanders.

Exhibit 4-2: Differential Treatment for Asian and Pacific Islander Homebuyers by Skin Tone

HOUSING AVAILABILITY	Dark-Skinned			Light-Skinned			Diff from Dark-Skinned		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit available?	12.2%	15.7%	-3.4%	18.7%	14.6%	4.1%	-6.5%	1.1%	-7.6%
Similar units available?	14.0%	8.0%	6.0%	17.7%	10.6%	7.1% *	-3.7%	-2.6%	-1.1%
Number units recommended	43.8%	38.9%	4.9%	47.5%	32.8%	14.7% **	-3.7%	6.1%	-9.9%
Overall availability	44.0%	44.2%	-0.2%	53.8%	32.9%	20.9% **	-9.8%	11.3% *	-21.1% *
HOUSING INSPECTION	Dark-Skinned			Light-Skinned			Diff from Dark-Skinned		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit inspected?	14.4%	10.3%	4.1%	16.9%	10.3%	6.6% *	-2.4%	0.0%	-2.5%
Similar units inspected?	21.4%	11.6%	9.7% *	18.0%	13.2%	4.9%	3.3%	-1.5%	4.9%
Number units inspected	40.3%	39.6%	0.7%	47.9%	28.5%	19.4% **	-7.6%	11.1% *	-18.6% *
Overall inspection	47.8%	38.1%	9.8%	52.6%	29.9%	22.8% **	-4.8%	8.2%	-13.0%
GEOGRAPHIC STEERING	Dark-Skinned			Light-Skinned			Diff from Dark-Skinned		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Steering - homes recommended	18.0%	27.8%	-9.8%	19.1%	13.1%	6.0%	-1.1%	14.7% **	-15.8% **
Steering - homes inspected	17.4%	24.1%	-6.7%	16.2%	12.1%	4.1%	1.2%	12.1% **	-10.8%
FINANCING ASSISTANCE	Dark-Skinned			Light-Skinned			Diff from Dark-Skinned		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Help with financing offered?	25.9%	17.9%	8.0%	29.6%	8.6%	21.0% **	-3.7%	9.4%	-13.0% *
Agent prequalified tester?	15.2%	20.7%	-5.5%	28.2%	14.5%	13.7% **	-13.1% **	6.2%	-19.3% **
Lenders recommended?	20.0%	17.3%	2.6%	20.1%	12.8%	7.4% *	-0.2%	4.5%	-4.7%
Overall financing	38.5%	31.6%	6.9%	45.3%	25.2%	20.1% **	-6.8%	6.4%	-13.2%
AGENT ENCOURAGEMENT	Dark-Skinned			Light-Skinned			Diff from Dark-Skinned		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Follow-up contact from agent?	14.0%	9.6%	4.3%	8.6%	15.2%	-6.6% *	5.4%	-5.6%	10.9% *
Prequalification required?	10.9%	2.7%	8.2% **	11.9%	8.8%	3.1%	-1.0%	-6.1%	5.1%
Told qualified?	16.4%	16.6%	-0.2%	29.8%	11.2%	18.6% **	-13.4% **	5.4%	-18.8% **
Arrangements for future?	11.8%	7.7%	4.1%	10.3%	9.8%	0.5%	1.5%	-2.2%	3.6%
Overall encouragement	35.5%	28.0%	7.5%	37.8%	35.6%	2.2%	-2.3%	-7.6%	5.3%
SUMMARY MEASURES	Dark-Skinned			Light-Skinned			Diff from Dark-Skinned		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Hierarchical	54.3%	41.9%	12.4%	59.4%	39.1%	20.4% **	-5.2%	2.8%	-8.0%
Consistency	17.5%	11.0%	6.5%	21.9%	10.0%	11.9% **	-4.4%	1.0%	-5.4%

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Differences Based on Advertising Sources

Phase II of HDS2000 expanded the advertising sources used to sample available housing units because of concerns that estimates of discrimination based only on major metropolitan areas might not reflect the housing market as a whole. We anticipated that discrimination might be higher for units advertised in sources serving predominantly white communities, and lower in sources serving integrated or predominantly minority communities, compared to units advertised metro-wide. Because major metropolitan newspapers are readily available to homeseekers from all racial and ethnic groups, it seems possible that agents who use this source for advertising may be less likely to discriminate than agents who use sources with more limited circulation.

In theory, differences in patterns of treatment by source of advertising seem just as likely in the sales market as in the rental market. However, many of the local fair housing organizations that participated in Phase I of HDS2000 indicated that the sample of advertised housing units obtained from the major metropolitan newspapers was particularly limited on the rental side. Therefore, we expected differences in patterns of adverse treatment to be more pronounced for rental markets than for sales markets, because more areas seemed to be under-represented in the classified advertisements of the major metropolitan newspapers.

Comparing patterns of adverse treatment for units advertised in major metropolitan newspapers to units advertised in all other sources (such as community papers, rental guides, and the internet)² indicates that discrimination against Asians and Pacific Islanders seeking rental housing does not vary significantly by type of advertising source. However, Asian and Pacific Islander homebuyers appear to face a significantly higher level of discrimination when they inquire about units advertised in sources other than major metropolitan newspapers. Differences are statistically significant for most of the housing availability indicators and for a geographic steering indicator, but not for overall composite measures.

The lower-bound (net) measure of discrimination for rental incentives is the only rental treatment measure that reflects a significantly higher level of discrimination for Asians and Pacific Islanders who inquired about rental units advertised in other types of sources compared to those using ads in major metro papers (see Exhibit 4-5).

² See chapter 2 and Annex 1 for a more detailed discussion on selection of ad sources.

Exhibit 4-5: Differential Treatment for Asian and Pacific Islander Renters by Advertising Source[†]

HOUSING AVAILABILITY	Other Ad Sources			Major Metro Classifieds			Diff from Other Ad Sources		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit available?	7.7%	5.9%	1.9%	5.7%	7.5%	-1.8%	2.1%	-1.6%	3.6%
Similar units available?	12.5%	10.2%	2.3%	12.1%	8.5%	3.6%	0.4%	1.7%	-1.3%
Number units recommended	29.6%	21.9%	7.7%	26.2%	16.0%	10.2%	3.3%	5.9%	-2.6%
Overall availability	34.4%	22.5%	11.9% **	29.4%	18.8%	10.6%	5.0%	3.7%	1.3%
HOUSING INSPECTION	Other Ad Sources			Major Metro Classifieds			Diff from Other Ad Sources		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit inspected?	5.2%	9.3%	-4.1%	4.6%	8.7%	-4.1%	0.7%	0.6%	0.1%
Similar units inspected?	5.0%	7.0%	-2.0%	5.8%	5.2%	0.6%	-0.9%	1.7%	-2.6%
Number units inspected	9.5%	18.1%	-8.6% **	11.8%	18.6%	-6.8%	-2.3%	-0.5%	-1.8%
Overall inspection	12.0%	19.8%	-7.8% *	12.8%	18.5%	-5.7%	-0.8%	1.3%	-2.1%
HOUSING COST	Other Ad Sources			Major Metro Classifieds			Diff from Other Ad Sources		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Rent for advertised unit	10.8%	10.5%	0.3%	7.0%	1.0%	5.9%	3.8%	9.4% **	-5.6%
Rental incentives offered?	11.8%	5.0%	6.8% **	5.7%	7.9%	-2.1%	6.1%	-2.8%	8.9% *
Amount of security deposit	7.2%	15.5%	-8.3%	9.4%	12.1%	-2.7%	-2.2%	3.4%	-5.6%
Application fee required?	6.4%	9.6%	-3.2%	10.6%	7.7%	2.9%	-4.2%	1.9%	-6.1%
Overall cost	19.7%	20.7%	-1.0%	17.6%	17.9%	-0.3%	2.1%	2.7%	-0.6%
AGENT ENCOURAGEMENT	Other Ad Sources			Major Metro Classifieds			Diff from Other Ad Sources		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Follow-up contact from agent?	5.5%	0.9%	4.6% **	4.9%	4.0%	0.9%	0.7%	-3.1%	3.8%
Asked to complete application?	14.2%	22.1%	-7.9% *	17.6%	23.6%	-6.1%	-3.3%	-1.5%	-1.9%
Credit check required?	14.9%	21.4%	-6.5%	14.4%	19.4%	-5.0%	0.5%	2.0%	-1.5%
Arrangements for future?	15.9%	14.0%	1.9%	19.7%	17.3%	2.4%	-3.8%	-3.3%	-0.5%
Overall encouragement	36.0%	40.9%	-4.9%	41.6%	39.0%	2.6%	-5.6%	2.0%	-7.6%
SUMMARY MEASURES	Other Ad Sources			Major Metro Classifieds			Diff from Other Ad Sources		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Hierarchical	50.3%	40.8%	9.5%	52.1%	41.5%	10.6%	-1.8%	-0.7%	-1.1%
Consistency	21.7%	17.3%	4.5%	21.8%	18.9%	2.9%	-0.1%	-1.6%	1.5%

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

† These results are based on Phase 2 API sites only and do not include Phase 1 API sites (Los Angeles and Minneapolis). 87 rental tests used advertisements from major metro newspapers while 168 rental tests used advertisements from other types of sources.

Among sales tests, statistically significant differences based on type of advertising source are most notable for the housing availability category (see Exhibit 4-6). The lower-bound (net) estimates of discrimination against Asian and Pacific Islander homebuyers inquiring about housing advertised in other types of sources are significantly higher than for major metropolitan newspapers for availability of similar units, number of recommended units, and the overall availability indicator. In addition, the net measure of steering for inspected homes is significantly higher for units advertised in other types of ad sources compared to those advertised in major metro newspapers.

Exhibit 4-6: Differential Treatment for Asian and Pacific Islander Homebuyers by Advertising Source[†]

HOUSING AVAILABILITY	Other Ad Sources			Major Metro Classifieds			Diff from Other Ad Sources		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit available?	16.5%	13.0%	3.5%	15.9%	19.6%	-3.7%	0.6%	-6.6%	7.2%
Similar units available?	21.3%	9.5%	11.8% **	13.3%	13.4%	-0.1%	7.9%	-3.9%	11.8% *
Number units recommended	54.1%	29.7%	24.4% **	36.7%	39.5%	-2.9%	17.5% **	-9.8%	27.3% **
Overall availability	56.0%	33.1%	22.9% **	40.6%	43.9%	-3.4%	15.4% **	-10.9% *	26.3% **
HOUSING INSPECTION	Other Ad Sources			Major Metro Classifieds			Diff from Other Ad Sources		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit inspected?	17.2%	9.0%	8.3% **	12.7%	13.3%	-0.6%	4.5%	-4.4%	8.9%
Similar units inspected?	23.2%	11.2%	12.0% **	18.0%	8.5%	9.4% *	5.2%	2.7%	2.6%
Number units inspected	48.8%	30.5%	18.3% **	45.1%	29.4%	15.7% *	3.8%	1.1%	2.6%
Overall inspection	53.0%	31.3%	21.7% **	49.6%	30.4%	19.1% **	3.4%	0.8%	2.6%
GEOGRAPHIC STEERING	Other Ad Sources			Major Metro Classifieds			Diff from Other Ad Sources		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Steering - homes recommended	16.8%	12.4%	4.4%	17.2%	19.0%	-1.9%	-0.4%	-6.7%	6.2%
Steering - homes inspected	14.3%	11.2%	3.1%	10.0%	18.3%	-8.3%	4.4%	-7.1%	11.5% *
FINANCING ASSISTANCE	Other Ad Sources			Major Metro Classifieds			Diff from Other Ad Sources		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Help with financing offered?	30.4%	11.6%	18.8% **	25.3%	15.9%	9.4%	5.1%	-4.3%	9.4%
Agent prequalified tester?	20.7%	21.2%	-0.5%	19.5%	16.5%	3.0%	1.2%	4.7%	-3.5%
Lenders recommended?	18.9%	12.7%	6.3%	18.9%	15.3%	3.6%	0.0%	-2.6%	2.6%
Overall financing	40.1%	29.2%	10.9%	42.2%	29.3%	12.8%	-2.1%	-0.1%	-1.9%
AGENT ENCOURAGEMENT	Other Ad Sources			Major Metro Classifieds			Diff from Other Ad Sources		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Follow-up contact from agent?	11.9%	14.2%	-2.3%	10.7%	14.6%	-3.9%	1.2%	-0.3%	1.5%
Prequalification required?	10.1%	3.0%	7.1% **	11.4%	4.0%	7.5% *	-1.3%	-0.9%	-0.4%
Told qualified?	18.4%	13.2%	5.2%	20.5%	21.0%	-0.5%	-2.1%	-7.8%	5.7%
Arrangements for future?	11.7%	8.8%	2.9%	16.6%	15.0%	1.5%	-4.8%	-6.2%	1.4%
Overall encouragement	37.1%	31.0%	6.1%	31.4%	35.9%	-4.5%	5.7%	-4.9%	10.6%
SUMMARY MEASURES	Other Ad Sources			Major Metro Classifieds			Diff from Other Ad Sources		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Hierarchical	64.2%	34.2%	30.0% **	55.6%	40.5%	15.1%	8.6%	-6.3%	14.9%
Consistency	26.2%	9.4%	16.8% **	15.4%	8.4%	7.0%	10.8% **	1.0%	9.8%

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

[†] These results are based on Phase 2 API sites only and do not include Phase 1 API sites (Los Angeles and Minneapolis). 95 sales tests used advertisements from major metro newspapers while 155 sales tests used advertisements from other types of sources.

4. Variations in Discrimination Against Asians and Pacific Islanders	1
Differences Based on Skin Color.....	1
Differences Based on Advertising Sources	4

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ANNEX 1

AD SAMPLING SOURCES FOR ASIAN AND PACIFIC ISLANDER (API) SITES AND DISTRIBUTION OF TESTS BY SOURCE TYPE

ANNEX 1: AD SAMPLING SOURCES FOR API SITES AND DISTRIBUTION OF TESTS BY SOURCE TYPE

	Major Metro Newspapers	Community Papers	Rental/Sales Guides	Internet
Anaheim	LA Times Orange County Register	Daily Pilot	Apartments for Rent Apartment Guide Harmon Homes Homes and Land Home Emporium Homes Magazine Open House	--
Chicago	Chicago Tribune	Chicago Reader Daily Herald Daily Southtown Pioneer Press	Apartment Guide Harmon Homes	--
Honolulu	Honolulu Advertiser Honolulu Star-Bulletin	--	Homes and Land Open House Illustrated Rentals Illustrated	--
New York	Daily News Newsday NY Times	Bay News Bay Ridge Courier Brooklyn Graphic Canarsie Digest Courier-Life Flatbush Life Journal News Kings Courier Riverdale Press Staten Island Advance Village Voice	Yorktown PennySaver	--
Oakland	Oakland Tribune	Express Contra Costa Times insidebayarea.com (combination of local papers)	Apartment Guide Homes and Land Real Estate Connection Real Estate Book	www.craigslist.org
San Diego	San Diego Union Tribune	San Diego Weekly Reader North County Times	Apartments for Rent Real Estate Book	--

(Continued)

Discrimination in Metropolitan Housing Markets: Phase 2 - Asians and Pacific Islanders

	Major Metro Newspapers	Community Papers	Rental/Sales Guides	Internet
San Francisco	San Francisco Chronicle	Burlingame Daily News Marin Independent Journal Palo Alto Daily News Palo Alto Weekly Redwood City Daily News Saint Mateo Daily News	Apartment Guide Harmon Homes Rental Guide	www.craigslist.org
San Jose	San Jose Mercury News	Los Altos Town Crier Los Gatos Weekly Mountain View Voice Palo Alto Weekly	Apartment Guide The Property Pages	--
Washington, DC	Washington Post	The Gazette Maryland Independent Potomac News Washington City Paper	Apartment Shoppers Guide Apartment Showcase Real Estate Book	--
		168		
		155		

ANNEX 2

TEST ASSIGNMENT FORMS, REPORTING FORMS, AND INSTRUCTIONS

**The Urban Institute
Housing Discrimination Study**

Test Assignment Form (Rental)

SITECODE	Site	UI Training Test Site
CONTROL	0 CONTROL #	ZZ-R1-0125-2
SEQUENCE	Tester sequence	1
RACEID	RACEID	*****
TESTERID	0 TESTER ID NUMBER	ZZ329-Janelle Scott
ATSTTYPE	0 TYPE OF TEST	rental
AAPPTYPE	0 TYPE OF APPROACH	Drop-In
ADATEV	DATE OF VISIT (mm/dd/yy)	7/15/01
ATIMEV	Time (_ _:_ _)	10:00
ATIMEVM	A.M. P.M. for time of visit	AM
header9	TEST SITE	
PPNAME	1 Name of Test site (if known)	*****
header11	Site Address	
PADDRS	2 street	*****
PCITY	2 city	*****
PSTATE	2 state	*****
PZIP	2 ZIP 00000	*****
Head171	Telephone number(s) of test site:	
PPHN1	3 First Number (000)000-0000	*****
PPHN2	3 Second Number: (000)000-0000	*****
header20	SOURCE OF INFORMATION ON TEST SITE	
SRCENAME	4 Advertisement: Name of source	Milwaukee Journal Sentinel
ADDATE	5 Advertisement: Date of Publication (mm/dd/yy)	6/10/01
ADTEXT	6 Advertisement: text of ad	CEDARBURG CEDAR PLAZA N142 W6212 Concord St. Suburban living within minutes of

		Milwaukee. Near Hwy 57 and C 2 Bedroom Apartments Appliances, Carpeting, Ceiling Fan \$630 includes HEAT, Security Deposit \$400 1 year lease, no pets. 262-375-1513.	
header24	TYPE OF HOUSING TO BE REQUESTED		
PBEDS	7 Number of Bedrooms to be requested	2	
PMINBED	7a Minimum number of bedrooms for household	0	
PHMTYPS	8 Type of home (SALES only)	-1	
PHMTYPR	9 Type of unit (RENTAL only)	Unfurnished	
PHNEED	10 Date Housing is Needed (mm/dd/yy)	8/1/01	
PHMPRI	Home price	*****	
PHHCOMP	8 Household Composition	Married Couple, No Children	
APRIR	11 Price Range [Tester may look at units for LESS than this range as well] (For RENTAL Only)	605 to 655	
APREFER	Area Preference (IMPORTANT: DO NOT CITE A NEIGHBORHOOD PREFERENCE)		
AAREAP	12 If you are pressed by the agent, you may state that you are looking in	Milwaukee and surrounding counties	
header33	Remember: You are always open to considering any areas recommended by the agent.		
AMOVERR	13 Reason for Moving (Rental Tests)	Lvng with family member/friend; want own place	
AMOVERS	13 Reason for moving (Sales Tests)		
AHEAD55	Other places visited: Just started looking		
header36	ASSIGNED CHARACTERISTICS		
TFNAME	15 Tester Name:	Janelle Scott	
header38	Tester Address		

TFADD1	16 Tester Address	2100 Pine Road
TFADD2	16 Tester Address (city/state/zip)	Milwaukee, Wisconsin, 53205
TVPHONE	16 Voice Mail Number Assigned to Tester (000)000-0000	(414)348-6788
header42	Information on Persons in Household	
ARACE1	18 Tester's race	Black
TSEX	18 Tester's gender	Female
AAGE1	18 Tester's age	25

TH01	Household Income	Gross Monthly Income	Gross Annual Income
AINCMON1	18 Tester	1475	17450
AINCMON2	18 Spouse	1150	14050
AINCMONT	18 Total for Household	2625	31500

TABH11	Other persons in household	Relationship	Name	Sex	Age
ARELATE2	18 Person 2	Spouse	Bill Scott	Male	26
ARELATE3	18 Person 3			Female	-1
ARELATE4	18 Person 4			Female	-1
ARELATE5	18 Person 5			Female	-1

header73	Employment Information	
AOCC1	19 Tester current occupation	Clerk
AEMP1	19 Name of tester's current employer	Milwaukee Area Technical College
AEAD11	19 First line of tester's employer's address	State Street
AEAD12	19 Second line of tester's employer's address	Milwaukee, WI
AELNG1	19 Length of employment at current job	3 years
AOCC2	19 Tester previous occupation	
AEMP2	Name of tester's previous employer	
AEAD21	19 First line of tester's previous employer's address	

AEAD22	19 Second line of tester's previous employer's address	
AELNG2	19 Length of employment at previous job	
ASOCC1	19 Spouse's occupation at current job	Sales Associate
ASEMP1	19 Name of spouse's current employer	JC Penney Catalog Dept.
ASEAD11	19 First line of spouse's employer's address	Highland Mall
ASEAD12	19 Second line of spouse's employer's address	Mequon
ASELNG1	19 Spouse's length of employment at current job	4 years
ASOCC2	19 Spouse's occupation at previous job	
ASEMP2	Name of spouse's previous employer	
ASEAD21	19 First line of spouse's previous employer's address	
ASEAD22	19 Second line of spouse's previous employer's address	
header94	Household Assets	

TH31		Financial Institution	Balance
ASAVINST	20 Savings Account		-1
ACHKINST	20 Checking Account		-1
AOTRINST	20 Other asset		-1
ATOTASST	20 Total Assets	-1	
header10	Household Debts		

TABH21	Creditors	Name	Type of account	Monthly payment	Balance owed
ACRDNAM1	21 Creditor 1			-1	-1
ACRDNAM2	21 Creditor 2			-1	-1
ACRDNAM3	21 Creditor 3			-1	-1
ACRDNAM4	21 Creditor 4			-1	-1
ACRDNAM5	21 Creditor 5			-1	-1

ACRDNAM6	21 Creditor 6			-1	-1
ACRDNAM7	21 Creditor 7			-1	-1
ACRDMONT	21 Total monthly payments on all debts	-1			
ACRDBALT	21 Total balance owed on all debts	-1			
AHEAD21	Credit standing: Excellent, no late payments				
header13	CURRENT HOUSING SITUATION				
AHEAD31	Type of current housing: Rent				
ARENTNOW	24 Amount of Current Rent	620			
ALGNCUR	25 Years at Current Residence	2 years			
ALEASETP	26 Type of Rental Agreement at Current Residence	Month-to-Month			
AHEAD61	History of rent payment at current residence: Always on time				
AHEAD62	Other characteristics: Non-smoking, No pets				
ADSITE	28 Directions to the Test Site	Hwy 57 to C. Left on C 1 block, turn right into office.			
RELEASE	Test Released	Yes			



Test Assignment Form (Sales)

SITECODE	Site	UI Training Test Site
CONTROL	0 CONTROL #	ZZ-S1-0125-2
SEQUENCE	Tester sequence	1
RACEID	RACEID	*****
TESTERID	0 TESTER ID NUMBER	ZZ124-William Morrison
ATSTTYPE	0 TYPE OF TEST	sales
AAPPTYPE	0 TYPE OF APPROACH	Call for appointment
ADATEV	DATE OF VISIT (mm/dd/yy)	
ATIMEV	Time (_ _:_ _)	
ATIMEVM	A.M. P.M. for time of visit	
header9	TEST SITE	
PPNAME	1 Name of Test site (if known)	*****
header11	Site Address	
PADDRS	2 street	*****
PCITY	2 city	*****
PSTATE	2 state	*****
PZIP	2 ZIP 00000	*****
Head171	Telephone number(s) of test site:	
PPHN1	3 First Number (000)000-0000	*****
PPHN2	3 Second Number: (000)000-0000	*****
header20	SOURCE OF INFORMATION ON TEST SITE	
SRCENAME	4 Advertisement: Name of source	Milwaukee Journal Sentinel
ADDATE	5 Advertisement: Date of Publication (mm/dd/yy)	6/10/01
ADTEXT	6 Advertisement: text of ad	GERMANTOWN Prime location N102W14738 Providence Ct. 4BR, 2.5BA, 2 story on cul de sac, 3/4 ac landscaped lot.

		1996. 3000+ sq ft. FT, 1st floor utility, deck, office, large master suite, \$339,900. 262-253-0961.	
header24	TYPE OF HOUSING TO BE REQUESTED		
PBEDS	7 Number of Bedrooms to be requested	4	
PMINBED	7a Minimum number of bedrooms for household	2	
PHMTYPS	8 Type of home (SALES only)	Single Family	
PHMTYPR	9 Type of unit (RENTAL only)	-1	
PHNEED	10 Date Housing is Needed (mm/dd/yy)		
PHMPRI	Home price	*****	
PHHCOMP	8 Household Composition	Married Couple, 2 Children (Same Gender)	
APRIR	11 Price Range [Tester may look at units for LESS than this range as well] (For RENTAL Only)		
APREFER	Area Preference (IMPORTANT: DO NOT CITE A NEIGHBORHOOD PREFERENCE)		
AAREAP	12 If you are pressed by the agent, you may state that you are looking in	Milwaukee and surrounding suburbs	
header33	Remember: You are always open to considering any areas recommended by the agent.		
AMOVERR	13 Reason for Moving (Rental Tests)		
AMOVERS	13 Reason for moving (Sales Tests)	Seems like a good time to buy	
AHEAD55	Other places visited: Just started looking		
header36	ASSIGNED CHARACTERISTICS		
TFNAME	15 Tester Name:	Bill Morrison	
header38	Tester Address		
TFADD1	16 Tester Address	1620 Wisconsin Ave.	

TFADD2	16 Tester Address (city/state/zip)	Apt. #42
TVPHONE	16 Voice Mail Number Assigned to Tester (000)000-0000	(414)555-0000
header42	Information on Persons in Household	
ARACE1	18 Tester's race	Black
TSEX	18 Tester's gender	Male
AAGE1	18 Tester's age	39

TH01	Household Income	Gross Monthly Income	Gross Annual Income
AINCMON1	18 Tester	6730	80750
AINCMON2	18 Spouse	5045	60550
AINCMONT	18 Total for Household	11775	141300

TABH11	Other persons in household	Relationship	Name	Sex	Age
ARELATE2	18 Person 2	Spouse	Barbara	Female	32
ARELATE3	18 Person 3	Child	William	Male	6
ARELATE4	18 Person 4	Child	David	Male	2
ARELATE5	18 Person 5			Female	-1

header73	Employment Information	
AOCC1	19 Tester current occupation	District Manager
AEMP1	19 Name of tester's current employer	Marriott Services
AEAD11	19 First line of tester's employer's address	64th Street
AEAD12	19 Second line of tester's employer's address	Wauwatosa
AELNG1	19 Length of employment at current job	5 years
AOCC2	19 Tester previous occupation	Sales Representative
AEMP2	Name of tester's previous employer	Holiday Inn
AEAD21	19 First line of tester's previous employer's address	3rd Street
AEAD22	19 Second line of tester's previous	South

	employer's address	Milwaukee
AELNG2	19 Length of employment at previous job	4 years
ASOCC1	19 Spouse's occupation at current job	Database Administrator
ASEMP1	19 Name of spouse's current employer	Children's Medical Center
ASEAD11	19 First line of spouse's employer's address	Good Hope Rd.
ASEAD12	19 Second line of spouse's employer's address	Milwaukee
ASELNG1	19 Spouse's length of employment at current job	4 years
ASOCC2	19 Spouse's occupation at previous job	Computer Programmer
ASEMP2	Name of spouse's previous employer	University of WI
ASEAD21	19 First line of spouse's previous employer's address	Milwaukee
ASEAD22	19 Second line of spouse's previous employer's address	
header94	Household Assets	

TH31		Financial Institution	Balance
ASAVINST	20 Savings Account	First Bank	35750
ACHKINST	20 Checking Account	First Bank	4850
AOTRINST	20 Other asset		-1
ATOTASST	20 Total Assets	40600	
header10	Household Debts		

TABH21	Creditors	Name	Type of account	Monthly payment	Balance owed
ACRDNAM1	21 Creditor 1	GMAC	Car loan	566	8690
ACRDNAM2	21 Creditor 2	Citibank Visa	Credit Card	309	7720
ACRDNAM3	21 Creditor 3	Citibank Master Card	Credit Card	56	1740

ACRDNAM4	21 Creditor 4	Macy's	Credit Card	34	1160
ACRDNAM5	21 Creditor 5			0	0
ACRDNAM6	21 Creditor 6			0	0
ACRDNAM7	21 Creditor 7			0	0
ACRDMONT	21 Total monthly payments on all debts	965			
ACRDBALT	21 Total balance owed on all debts	19300			
AHEAD21	Credit standing: Excellent, no late payments				
header13	CURRENT HOUSING SITUATION				
AHEAD31	Type of current housing: Rent				
ARENTNOW	24 Amount of Current Rent	3000			
ALGNCUR	25 Years at Current Residence	4 years			
ALEASETP	26 Type of Rental Agreement at Current Residence	Month-to-Month			
AHEAD61	History of rent payment at current residence: Always on time				
AHEAD62	Other characteristics: Non-smoking, No pets				
ADSITE	28 Directions to the Test Site	Get directions at time of appointment call			
RELEASE	Test Released	Yes			

ADVANCE CALL FORM
(COMPLETE ONE FORM FOR EACH CALL ATTEMPTED)

Control # _____ - _____ - _____ - 2 Person Making Call: _____

Phone Number(s) (_____) _____ ; (_____) _____

Day of the Week: _____

Date ____ / ____ / ____ Time ____ : ____ AM PM

1. Housing Information (enter one type of unit [i.e., bedroom size] per line):

Address of Apartment/House	# of Bedrooms	Price	Date Available __ / __ / __	Advertised Unit?
a.				<input type="checkbox"/> Yes <input type="checkbox"/> No
b.				<input type="checkbox"/> Yes <input type="checkbox"/> No
c.				<input type="checkbox"/> Yes <input type="checkbox"/> No
d.				<input type="checkbox"/> Yes <input type="checkbox"/> No
e.				<input type="checkbox"/> Yes <input type="checkbox"/> No

2. What are the office hours? _____

3. Is it possible to drop in and speak with an agent about the available housing or do you have to have an appointment? May Drop in Must have Appointment

4. Verify the address of the office to be visited: _____

5. With whom did you speak? : _____

6. **COMMENTS:**

7. **What was the FINAL DISPOSITION of this call?**

Advance Call Completed

Advance Call Not Completed (check one of the following):

Left Message on Voicemail, Answering Machine, or Pager

Left Message with Person

Told to Call Back Later

Wrong Number

No Answer

Telephone Number No Longer in Service

Other (Specify: _____)

APPOINTMENT CALL FORM

(ALL CONTACTS WITH AGENT MADE **PRIOR** TO ANY SITE VISIT SHOULD BE RECORDED ON AN APPOINTMENT CALL FORM. COMPLETE ONE FORM FOR EACH CALL ATTEMPTED BY TESTER OR RECEIVED FROM AGENT.)

Control # ____ - ____ - ____ - 2

Tester ID # ____ - ____

Phone Number (s) (____) _____ ; (____) _____

Day of the Week: _____

Date ____ / ____ / ____ Time ____ : ____ AM PM

Call was Initiated by: Tester (Go to Q1) Agent (Go to Q7)

1. Was the Appointment Call Completed?

Yes, Appointment Call Completed

Appointment made (Go to Q2)

Appointment not made

Told no appointment necessary to visit

Agent will not make an appointment

No housing is available

Other (specify): _____

Test terminated by Test Coordinator ____

No, Appointment Call Not Completed*

Left message on voicemail, pager, etc.

Left message with person

Told to call back later

Wrong number

No Answer

Telephone number no longer in service

Other (specify): _____

Test terminated by Test Coordinator

*** If an Appointment Call is Not Completed, a Site Visit Cannot Be Conducted.**

2. When is your appointment?

Day of the Week _____

Date ____ / ____ / ____

Time ____ : ____ AM PM

3. Name of person you have appointment with: _____

4. Location to meet (agent's office, address of specific home, other): _____

5. Name of person you spoke with during this contact: _____

6. Comments made: _____

FOR AGENT INITIATED CALL:

7. Call was Received By: Tester Test Coordinator

7a. What was the Purpose of the Agent's Call?

Agent called to confirm appointment time

Agent called to cancel appointment and reschedule

Agent called to cancel appointment, but did not reschedule

Other (specify): _____

8. How many minutes did you wait to meet with someone (i.e. between the time you were greeted by someone when you entered and the time you met with the agent)?

_____ minutes

9. When you asked about the availability of the advertised housing, what were you told [*check only ONE box*]?

- Housing is available when I need it
- Housing is not available when I need it
- The agent did not know the status of the housing
- Something else (*specify*): _____

10. When you asked about “similar” housing, were you told that there was anything available?

[*“Similar” housing has the **same** number of bedrooms as the advertised housing, is in your price range, and is available when you need it.*]

- Yes
- No
- Agent did not know

10a. If Yes, how many “similar” housing units were you told about? (Do not include advertised unit)

_____ units

11. Whether you asked or the agent offered, were you told that any “other” housing was available?

[*“Other” housing has **at least** the minimum number of bedrooms for your household, is in your price range, and is available when you need it. “Other” housing also includes housing with a greater number of bedrooms than the advertised unit.*]

- Yes
- No
- Agent did not know
- Not applicable

11a. If Yes, how many “other” housing units were you told about? _____ Units

12. How many **TOTAL** rental units did the agent indicate were available to you?

_____ Rental Units

Note: Add units from Questions 9, 10a, and 11a. [if you answered Question 9 as “Housing is available when I need it,” count this as one unit]

13. During your visit, did the agent comment on or make reference to any of the following: Fair Housing Laws, Equal Housing Opportunity, Open Housing Ordinance, or Anti-discrimination Laws?

- Yes
- No

13a. If Yes, what was the comment or reference?

14. Were you invited to complete an application during your visit?

- Yes
- No

14a. Were you told an application is necessary before renting a unit?

- Yes
- No

14b. Were you invited to take an application with you?

- Yes
- No

14c. Were you told a credit check is necessary before renting a unit?

- Yes
- No

14d. Were you told a criminal background check is necessary before renting a unit?

- Yes
- No

15. Complete the grid below regarding any of your qualifications to rent that were requested by the agent. (*check only one per line*)

Qualification	I volunteered	Agent Requested	Exchanged in earlier phone call	Agent did not obtain
a. Your marital status				
b. Your family size				
c. Your income				
d. Your spouse's income				
e. Your occupation				
f. Your spouse's occupation				
g. Your length of employment				
h. Your spouse's length of employment				
i. Your credit standing				
j. Other:				

16. Did the agent make any of the following comments regarding your qualifications to rent?

- You are qualified
- You are NOT qualified
- Qualifications not discussed

17. Did the agent suggest that you consider a different rental complex or building than the one in the ad?

- Yes
- No

17a. If Yes, was the other property also managed by the same agency?

- Yes
- No
- Don't know

18. Were any remarks made by the agent about race or ethnicity that were not associated with the neighborhoods in which recommended units were located?

- Yes
- No

18a. If Yes, please record what the agent said:

19. Were any remarks made by the agent about religion, persons with disabilities, or families with children?

- Yes
- No

19a. If Yes, please record what the agent said:

20. What arrangements were made regarding future contact between you and the agent [*check all that apply*]?

- The agent said that he/she would contact you
- The agent invited you to call him/her
- Future arrangements were not made
- Other (*specify*): _____

21. When was this report completed?

Date (month/day/year): ____/____/____

Day of Week _____

Time __ __: __ __ AM PM

INSTRUCTIONS FOR ALL HDS SITE VISITS - RENTAL

- If you made an appointment prior to this visit, please ask to speak with the person with whom you made the appointment to meet. If you are dropping in without an appointment on this site visit, please ask to speak with a rental agent. Express interest in and ask to view the rental housing that was advertised for rent.
- Ask about the availability of other rental housing with the same number of bedrooms as the advertised housing. Express interest in and ask to view any rental housing which has the same number of bedrooms, provided that it is within your price range and available when you need it.
- If a rental agent informs you that the advertised housing is no longer available and no other rental housing is available with the same number of bedrooms as the advertised housing, ask the agent if any other rental units are available for the time you requested. Express interest in and ask to view any other rental housing that: 1) has at least the minimum number of bedrooms for your household; 2) is within your price range; and 3) is available when you need it.
- If, at any time during your site visit, a rental agent recommends other rental units to you, you should express interest in and ask to view any rental housing that is recommended by the agent provided it: 1) has at least the minimum number of bedrooms for your household; 2) is within your price range; and 3) is available when you need it.
- Please remember to obtain information about the exact address (including apartment #), number of bedrooms, rent, security deposit, other fees, lease length, which utilities are included and the dates of availability for any homes or apartments suggested by the agent if this information is not provided by the end of your visit.
- If you are told about any homes or apartments that meet your needs, please ask about the application process and find out what amount of money, if any, would need to accompany a completed application, whether a credit check is conducted and, generally, how long it takes to obtain approval on a rental application once it is submitted.
- Do not ask for or complete a rental application. If the agent offers you an application, you should agree to take it with you.
- If you are informed that there is a waiting list for rental housing that you requested, please ask how many people are on the waiting list. If the agent invites you to add your name to the waiting list, you should politely decline to add your name.
- Lastly, if by the end of your visit the agent has not volunteered his or her name, please ask for it.

5. Were you able to meet with an agent to discuss housing options?

Yes

No

5a. If Yes, where did you meet?

Agent's office

Somewhere else (specify):

5b. If No, why not?

(Note: Stop here and do not complete the rest of the form)

6. Did the agent decline to meet with you today?

Yes

No

6a. If yes, why? _____

(NOTE: if you are able to make an appointment for a later time, then stop here and fill out the Site Visit Report Form after your appointment)

7. How many minutes did you wait to meet with someone (i.e. between the time you were greeted by someone at the firm when you entered and the time you met with the agent)?

_____ minutes

8. When you asked about the availability of the home in the ad, what were you told [*check only ONE box*]?

Home is available

Home is not available

The agent did not know the status of the house.

Something else (*specify*): _____

9. Were you recommended any homes that were "similar" to the advertised home?

[A "similar" home has the **same** number of bedrooms as the advertised home.]

Yes

No

Agent did not know

9a. If Yes, how many "similar" homes were recommended to you? (Do not include advertised home)

_____ homes

10. Were you recommended any "other" homes?

[*"Other" homes have at least the minimum number of bedrooms for your household. "Other" housing also includes homes with a greater number of bedrooms than the advertised home.*]

Yes

No

Agent did not know

10a. If Yes, how many "other" homes were recommended to you? _____ Homes

11. How many TOTAL homes were recommended to you, **including** the advertised home?: _____
Add units from Questions 8 [if you answered "Home is available"], 9a, and 10a.

12. How many homes were offered to you for your review in a listing or other format, BUT NOT SPECIFICALLY RECOMMENDED? _____ Homes

13. During your visit, did the agent comment on or make reference to any of the following: Fair Housing Laws, Equal Housing Opportunity, Open Housing Ordinance, or Anti-discrimination Law?

Yes

No

13a. If Yes, what was the comment or reference?

14. Based on your observations and the remarks of the agent, indicate below the sources used to select properties for your review: *[check all that apply]*

Multiple listings book(s)

Home seeker guides/magazines

Computer

Internet website - (*specify*): _____

Other printed sheet

File cards

Scraps of paper

Other (*specify*): _____

None

15. Did one agent refer you to another agent who provided service to you?

Yes

No

15a. If Yes, were you referred to an agent within the same agency?

Yes

No

15b. If you were referred, using the numbers from Question 4, enter the number of the person to whom

you were referred: [enter line #]

16. Was the agent's role described to you as being one of the following:

Buyer's agent

Seller's agent

Dual agent

Did not disclose

17. Were you asked to sign any agreements or documents?

Yes

No

17a. If Yes, please specify each below:

	Document Name	Purpose	Did you sign?	
1.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
2.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
3.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
4.			<input type="checkbox"/> Yes	<input type="checkbox"/> No

18. Did the agent ask if you had already visited a lender or been pre-qualified for financing?

Yes

No

19. Did the agent REFUSE to show you any homes because you were not pre-qualified for financing?

Yes

No

20. Complete the grid below regarding any of your qualifications to purchase a house that were requested by the agent at any point. *(check only one per line)*

Qualification	I volunteered	Agent Requested	Obtained in earlier phone call	Agent did not obtain
a. Your marital status				
b. Your family size				
c. Your income				
d. Your spouse's income				
e. Your occupation				
f. Your spouse's occupation				
g. Your length of employment				
h. Your spouse's length of employment				
i. Your savings/assets (e.g. funds available for downpayment, closing costs, etc.)				
j. Your debts				
k. Credit Standing				
l. Reason for moving				
m. Geographic preference				
n. Pre-qualification letter				
o. Other:				

21. Did the agent make any of the following comments regarding your qualifications to buy a home?

- You are qualified
- You are NOT qualified
- Qualifications not discussed

22. Did the agent volunteer to help you find financing?

- Yes
- No

23. Did the agent suggest one or more mortgage companies, lenders, or brokers?

- Yes
- No

23a. If Yes, please list them below:

	Mortgage Company/Firm	Lender/Broker Name	City	Telephone
1.				
2.				
3.				
4.				

24. Did the agent discuss the type of financing that might be available to you?

- Yes
- No

24a. If Yes, please indicate which types of financing the agent discussed or mentioned by filling out the grid below: [check one per line]

	Agent Discussed	Agent did not mention
a. Conventional Fixed Rate Financing (non FHA)		
b. Conventional Adjustable Rate Financing (ARM)		
c. FHA or VA Financing		
d. Other government financing (state or local) (specify): _____		
e. Other (specify): _____		

25. During the visit, did anyone pre-qualify you or calculate for you the amount of financing that you could afford using your specific financial information (income, debts, and assets)?

- Yes
- No

25a. If Yes, using the numbers from Question 4, enter the number of the person who provided you with the information on the amount of financing you could afford: [enter line #]

25b. If Yes, was this person?

- The agent who was providing housing information to you
- An in-house mortgage specialist
- A lender by telephone
- Someone else

26. Home Price:

Did the agent suggest a house price or price range that you should consider?

- Yes
- No

26a. If Yes, what was the total home price?

\$ _____ (lowest) \$ _____ (highest)

27. Loan/Mortgage Amount:

Did the agent suggest a mortgage amount (\$ borrowed) or range that you should consider?

- Yes
- No

27a. If Yes, what was the total loan amount?

\$ _____ (lowest) \$ _____ (highest)

28. Interest Rates:

Did the agent mention interest rates for mortgage loans?

- Yes
- No

28a. If Yes, what were the interest rates mentioned?

_____ % (lowest) _____ % (highest)

29. Monthly Payments:

Did the agent mention monthly payments for a mortgage loan?

- Yes
- No

29a. If Yes, what were the monthly payments?

\$ _____ (lowest) \$ _____ (highest)

30. Downpayment:

Did the agent mention the likely downpayment on a house?

- Yes
- No

30a. If Yes, what was the downpayment amount or percentage?

Downpayment Amount: \$ _____ (lowest) \$ _____ (highest)

Downpayment Percent: _____ % (lowest) _____ % (highest)

31. Did the agent discuss any of the following with you? [check all that apply]

- Paying down debts
- Debt consolidation
- Downpayment assistance (gift, special program)
- Co-signer
- Seller assistance
- Pre-qualification letter
- None of the above were discussed

31a. For any items discussed, please describe what you were told:

32. Did the agent discuss or make any comments about specific neighborhoods or geographic areas that were not associated with any recommended homes? (If yes, fill out a Neighborhood Information Form.)

- Yes
- No

33. Were any remarks made by the agent about race or ethnicity that were not associated with particular homes or neighborhoods?

- Yes
- No

33a. If Yes, please record what the agent said: _____

34. Were any remarks made by the agent about religion, persons with disabilities, or families with children?

- Yes
- No

34a. If Yes, please record what the agent said: _____

35. What arrangements were made regarding future contact between you and the agent? [*check all that apply*]

- The agent said that he/she would contact you
- The agent invited you to call him/her
- Arrangements for future contact were not made
- Other (*specify*): _____

36. When was this report completed?

Date (month/day/year): ____/____/____

Day of Week _____

Time __ __:__ __ AM PM

INSTRUCTIONS FOR ALL HDS SITE VISITS - SALES

- If you made an appointment prior to this visit, please ask to speak with the person with whom you made the appointment to meet. If you are dropping in without an appointment on this site visit, please ask to speak with a sales agent. Express interest in and ask to view the housing that was advertised for sale.
- Ask the agent to recommend other homes that have the same number of bedrooms as the advertised housing. Express interest in and ask to view any homes that are recommended by the agent provided that they have the same number of bedrooms as the advertised home or at least the minimum number of bedrooms for your household.
- After viewing the advertised home, try to arrange to spend three hours looking at additional homes that are recommended by the agent. If, on the day of your initial site visit, the agent is unavailable or unable to show you the advertised home and/or other recommended homes, let the agent know that you would like to spend some time (e.g. a few hours, several hours, etc.) on another day viewing additional homes.
- If, in response to your request that the agent recommend some homes to view, the agent presents you with a long list of homes available for sale, please ask the agent to select homes to show you so that you can begin to get an idea of what is available. If the agent refuses to pick out any homes on the list and insists that you make the selections, please tell the agent that you would like to take the list of homes with you so that you can spend some time looking it over. NEVER select the homes to view.
- Please remember to obtain information about the exact address of each property that is recommended by the agent, including the number of bedrooms, current asking price, number of bathrooms, and other features and amenities, if this information is not provided by the end of your visit.
- If the agent, someone in the agent's office, or someone the agent calls while you are in the office, requests that you provide detailed personal and financial information about your income, debts, assets, etc. in order to help you figure out what price range of housing that you can afford, please provide this information exactly as it appears on your assignment form. Do not, UNDER ANY CIRCUMSTANCES, provide your date of birth, social security number, or authorize anyone to conduct a credit check. If anyone asks about your credit standing or requests that a credit check be conducted, offer to characterize your credit as it appears on your assignment form. If you are provided with an estimated price range or with an estimated mortgage amount for which you might qualify, please remember to include this information in your notes.
- If you are provided more detailed information about financing options, be sure to write down the information that is offered (e.g. type of financing, interest rates, down payment requirements, etc.). Also, if the agent refers you to a lender or mortgage broker for further assistance with financing, please remember to include this information in your notes.
- Lastly, if by the end of your visit the agent has not volunteered his or her name, please ask for it.

NEIGHBORHOOD INFORMATION

Complete one form for each neighborhood that the agent discussed with you other than those surrounding recommended and/or inspected homes.

CONTROL #: ___ - ___ - _____ - 2 **TESTER ID NUMBER:** ___ - _____

1. Name of Area: _____

2. This area is a:

- County
- Town or City
- School District
- Neighborhood
- Don't know

3. Did the agent make any of the following comments about the neighborhood?

a. *Noise*

- Quiet
- Noisy
- No comment

b. *Safety*

- Safe/low crime
- Dangerous/high crime
- No comment

c. *Schools*

- Good
- Poor
- No comment

d. *Investment*

- Rising values/good investment
- Flat values/not much appreciation
- Declining values/depreciation
- No comment

e. *Public Services*

- good services/amenities
- poor/unreliable services
- no comment

f. *Race or Ethnicity?*

- Yes
- No

If **Yes**, please record what the agent said: _____

RECOMMENDED HOME

(Complete one form for each home recommended and/or inspected)

CONTROL # ____ - ____ - ____ - 2

TESTER ID# ____ - ____ - ____

1. Full Address of Home

(number) _____ (street) _____ (unit) _____

(city or town) _____ (state) _____ (zip code) _____

2. Basic Information

- a. Is this the advertised home? Yes No
b. Did you inspect the home? Yes No
c. How many bedrooms were in the home? _____
d. What was the current asking price? _____

3. What type of building is it?

- Single-family detached
- Duplex
- Rowhouse or Townhouse
- Multi-family structure
- Mobile home

4. Is this a newly built home that has never been occupied?

- Yes
- No

5. How do you rate the physical condition of the home's INTERIOR?

- Clean and in excellent repair, move-in condition
- Some cleaning and minor maintenance needed, adequate
- Very dirty and in need of substantial maintenance, serious problems
- Not Applicable, did not view interior

6. How do you rate the physical condition of the home's EXTERIOR?

- Clean and in excellent repair, move-in condition
- Some cleaning and minor maintenance needed, adequate
- Very dirty and in need of substantial maintenance, serious problems
- Not Applicable, did not view exterior

7. Did the agent make any of the following comments about the surrounding neighborhood?

a. Noise

- Quiet
- Noisy
- No comment

b. Safety

- Safe/low crime
- Dangerous/high crime
- No comment

c. Schools

- Good
- Poor
- No comment

d. Investment

- Rising values/good investment
- Flat values/not much appreciation
- Declining values/depreciation
- No comment

e. Public Services

- Good Services/Amenities
- Poor Services/Amenities
- No comment

f. Race or ethnicity? Yes No

If Yes, please record what the agent said: _____

FOLLOW-UP CONTACT FORM

- COMPLETE AT LEAST ONE FORM FOR EACH TEST
- DO NOT USE THIS FORM FOR APPOINTMENT CALLS
- TESTER: NOTIFY TEST COORDINATOR OF ANY CONTACT AND FORWARD MATERIALS RECEIVED

CONTROL #: ___ - ___ - _____ - 2

TESTER ID NUMBER: ___ - _____

1. Was there any follow-up contact?

- No
- Yes (if yes, complete rest of form)

2. Date and time of contact:

Day of the Week:

Date ___ / ___ / ___ /

Time ___ : ___ AM PM

3. Type of Contact

- Telephone call to tester at home
- Telephone message left at tester's home
- Voice mail message retrieved by Test Coordinator
- Postal mail
- E-mail
- Other (Specify: _____)

4. Name of person making contact:

5. Name of agency (if given):

6. What was the stated purpose of the contact? [check all that apply]

- Agent wanted to see if tester is still interested in purchase/rental
- Agent wanted to recommend a lender to the tester
- Agent wanted to let tester know about more housing
- Agent wanted to get more information from tester
- Agent wanted to thank tester
- Other [specify]:

7. Describe any materials received:

ANNEX 3

TESTS OF STATISTICAL SIGNIFICANCE

ANNEX 3: TESTS OF STATISTICAL SIGNIFICANCE

The gross measure of adverse treatment is simply an estimate of the probability that the white tester is favored over his or her minority partner, or the empirical mean of a variable (Z_{10}) that takes on the value of one if the white tester is favored and zero otherwise. In simple random samples, the standard error of the gross measure estimate is square root of the element variance of this discrete outcome divided by the sample size; the element variance of the variable is simply

$$\sigma_g^2 = E[Z_{10}^2] - E[Z_{10}]^2 = \Pr[W_{ik}=1, M_{ik}=0] (1.0 - \Pr[W_{ik}=1, M_{ik}=0])$$

where W_{ik} is a Bernoulli variable denoting a favorable outcome for the white tester (1=favorable; 0=unfavorable) and M_{ik} denotes the Bernoulli analogue for the Minority treatment outcome. Doubling the standard error yields a 95 percent confidence interval for the gross measure of adverse treatment. However, this apparently straightforward hypothesis test that the gross measure is greater than zero is not meaningful; the fact that any instances of white- or minority-favored treatment occurred in the sample of tests means (by definition) that the null hypothesis must be rejected (the probability of differential treatment in the total population cannot be equal to zero). In other words, a null hypothesis that a probability is zero is automatically rejected whenever at least one such event is observed.

The (effective) sample size for these tests is quite large, and based on the central limit theorem the 95 percent confidence interval for the gross measure is simply the estimated measure plus or minus 1.96 times the estimated standard error. This assumes that the estimated proportion is neither close to zero or one. If percentages are extreme (say, greater than 0.95 or less than 0.05), nonsymmetrical confidence intervals are calculated using formulae in Fleiss (1981) with adjustments to variance which incorporate the design effect. Also, note that the standard error cannot be used to provide a statistical test that the gross measure is greater than or equal to zero. The gross measure is the estimate of an event probability. The null hypothesis that a probability equals zero is rejected upon even a single observation of the event because if the null is true the event cannot occur.

The net measure of adverse treatment is the difference between the proportion of tests where the white is favored and the proportion where the minority is favored. For the net measure, the standard error of the estimate is based on a simple difference of means, and the variance of the net measure may be written as

$$\sigma_n^2 = \text{Var}[W_{ik}] + \text{Var}[M_{ik}] - 2 \text{Cov}[W_{ik}, M_{ik}]$$

W_{ik} and M_{ik} are both binary variables, and calculations of their variance are straightforward. The element covariance can be calculated as follows:

$$\sigma_{WM} = \Pr[W_{ik}=1, M_{ik}=1] * \Pr[W_{ik}=0, M_{ik}=0] - \Pr[W_{ik}=1, M_{ik}=0] * \Pr[W_{ik}=0, M_{ik}=1]$$

The null hypothesis that the net measure is positive and differs from zero (a one-sided test) is rejected with a 5 percent chance of a type I error or less if the net exceeds 1.65 times the estimated standard error.

Results for individual states and metropolitan areas are based on small sample sizes of approximately 70 to 120 tests per site, tenure, and ethnic group. The statistical tests described earlier could be replaced by a t-test with N-1 degrees of freedom in which N is the sample size. This test, however, requires either an assumption that the errors are distributed normally or a large enough sample size to invoke the central limit theorem, which insures normality of the mean even when errors are non-Normal. We apply the central limit theorem for the confidence intervals on the gross measure of adverse treatment. Gross adverse treatment is simply a binary or Bernoulli variable. In practice, the frequencies arising from a Bernoulli variable are approximately distributed normally when each cell contains at least five entries.

Neither the normality assumption nor the use of the central limit theorem is appropriate for the net measure of adverse treatment. For example, Heckman and Siegelman (1993) examines data from the Urban Institute employment tests and finds that the t-test for a difference of means is less likely to detect net adverse treatment against minority testers compared to more appropriate statistical tests.

Heckman and Siegelman (1993) suggest that the one-sided test for whether net adverse treatment is greater than zero can be written as simply

$$H_0: E[Y_{10} | Y_{11}=0, Y_{00}=0] \leq 0.5$$

where Y_{11} is one if $W_{ik}=1$ and $M_{ik}=1$ and Y_{00} is one if $W_{ik}=0$ and $M_{ik}=0$. This test conditions on the occurrence of either relatively favorable white or minority treatment, and tests whether the conditional likelihood of white-favored treatment is 50 percent. This test, often called the sign test, is the uniformly most powerful statistical test for this null hypothesis.

Under H_0 , the probability of observing N_2 or more tests in which the white tester receives favorable treatment and the minority tester does not is the number of permutations under this restriction divided by the total number of permutations for which N_d tests can be assigned to two outcomes.

$$\Pr[N_2 = k | N_d = N_2 + N_3] = N_d! / (2^{N_d} (N_d - k)! k!)$$

where N_3 is the number of tests in which outcome 3 is observed. The critical value (N_c) is chosen so that

$$\sum_{j=N_C}^{N_d} \text{Prob} [N_2 = j \mid N_d] \leq 0.05$$

Due to the nature of permutation tests, the sum of the probabilities will not equal 5 percent exactly. In principle, a randomization test may be conducted so that the null will be rejected with some probability if N_2 equals N_C minus one.¹ In practice, however, the probability of a type one error given the observed values is simply calculated by setting N_C equal to N_2 in the equation above.

Due to the small sample sizes for the three-part tests, we also use exact, non-parametric tests to determine the statistical significance of the net adverse treatment measures. A simple sign test can be constructed by creating a sample in which the events Y6 (W is not favored, M1 is favored, and M2 is not favored) and Y7 (W is not favored, M1 is not favored, and M2 is favored) each create one observation in which differential treatment occurs between testers of the same race and the event Y5 (W is favored, M1 is not favored, and M2 is not favored) creates two observations in which white favored treatment occurs ($Y5=1$). The resulting sign test is

$$\text{Prob}[Y5=1 \mid Y1 + Y2 + Y3 + Y4 + Y8 = 0] \leq 0.5$$

where the observations with $Y5=1$ enter the sample twice.²

¹ Heckman shows that a randomized test can be used to obtain significant tests with exactly a 5% probability of a type I error. The randomized test rejects the null hypothesis if the value of N_2 exceeds N_C , and also rejects the null hypothesis with probability α if the net measure equals the N_C minus one where the following equation holds: a $p_2 + p_1 = 0.05$, p_1 the probability of a type I error implied by the cut-off of N_C , and p_2 is the increase in the probability of a type I error implied by lowering the cut-off to N_C minus 1.

² Strictly speaking this test is no longer a permutation test because the event Y5 cannot truly occur twice and the two across group comparisons in the triad test are mutually exclusive. Nonetheless, the sign test does provide a convenient non-parametric test for whether two probabilities differ from each other.

ANNEX 4

METROPOLITAN ESTIMATES OF ADVERSE TREATMENT AGAINST ASIANS AND PACIFIC ISLANDERS FOR PHASE I

ANNEX 4A: METROPLITAN ESTIMATES OF ADVERSE TREATMENT AGAINST CHINESE AND KOREANS

LOS ANGELES - CHINESE/WHITE AND KOREAN/WHITE RENTAL TESTS

RENTAL TREATMENT MEASURES	Chinese/White			Korean/White		
	% white favored	% Chinese favored	net measure	% white favored	% Korean favored	net measure
Advertised unit available?	4.1%	9.5%	-5.4%	10.7%	8.0%	2.7%
Similar units available?	8.1%	17.6%	-9.5%	8.0%	6.7%	1.3%
Number units recommended	18.9%	24.3%	-5.4%	18.7%	25.3%	-6.7%
Overall availability	17.6%	29.7%	-12.2%	20.0%	25.3%	-5.3%
Advertised unit inspected?	10.8%	23.0%	-12.2%	13.3%	9.3%	4.0%
Similar units inspected	12.2%	8.1%	4.1%	4.0%	8.0%	-4.0%
Number units inspected	18.9%	14.9%	4.1%	17.3%	16.0%	1.3%
Overall inspection	17.6%	28.4%	-10.8%	18.7%	16.0%	2.7%
Rent for advertised unit	7.7%	5.1%	2.6%	10.9%	15.2%	-4.3%
Rental incentives offered?	4.1%	6.8%	-2.7%	8.0%	53.0%	2.7%
Amount of security deposit	3.8%	7.7%	-3.8%	2.6%	7.7%	-5.1%
Application fee required?	10.8%	13.5%	-2.7%	10.7%	8.0%	2.7%
Overall cost	16.2%	20.3%	-4.1%	20.0%	24.0%	-4.0%
Follow-up contact from agent?	1.4%	1.4%	0.0%	4.0%	27.0%	1.3%
Asked to complete application?	29.7%	8.1%	21.6% **	24.0%	13.3%	10.7%
Arrangements for future?	20.3%	12.2%	8.1%	33.3%	5.3%	28.0% **
Told qualified to rent?	1.4%	4.1%	-2.7%	0.0%	4.0%	-4.0%
Overall encouragement	37.8%	20.3%	17.6% *	42.7%	21.3%	21.3% **
Overall hierarchical	40.5%	47.3%	-6.8%	44.0%	42.7%	1.3%
Overall consistency	21.6%	17.6%	4.1%	30.7%	20.0%	10.7%

Note: For net estimates, * indicates statistical significance at the 90% level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

LOS ANGELES - CHINESE/WHITE AND KOREAN/WHITE SALES TESTS

RENTAL TREATMENT MEASURES	Chinese/White			Korean/White		
	% white favored	% Chinese favored	net measure	% white favored	% Korean favored	net measure
Advertised unit available?	14.3%	18.6%	-4.3%	16.7%	9.7%	6.9%
Similar units available?	12.9%	8.6%	4.3%	18.1%	12.5%	5.6%
Number units recommended	45.7%	42.9%	2.9%	40.3%	44.4%	-4.2%
Overall availability	47.1%	42.9%	4.3%	56.9%	37.5%	19.4%
Advertised unit inspected?	15.7%	20.0%	-4.3%	22.2%	6.9%	15.3% **
Similar units inspected?	31.4%	20.0%	11.4%	22.2%	15.3%	6.9%
Number units inspected	42.9%	41.4%	1.4%	37.5%	41.7%	-4.2%
Overall inspection	44.3%	44.3%	0.0%	59.7%	27.8%	31.9% **
Help with financing offered?	22.9%	15.7%	7.1%	43.1%	9.7%	33.3% **
Lenders recommended?	25.7%	25.7%	0.0%	20.8%	11.1%	9.7%
Downpayment reqs discussed?	41.4%	10.0%	31.4% **	23.6%	16.7%	6.9%
Overall financing	47.1%	31.4%	15.7%	56.9%	23.6%	33.3% **
Follow-up contact from agent?	17.1%	12.9%	4.3%	15.3%	13.9%	1.4%
Told qualified?	47.1%	2.9%	44.3% **	31.9%	12.5%	19.4% **
Arrangements for future?	11.4%	10.0%	1.4%	4.2%	1.4%	2.8%
Overall encouragement	57.1%	22.9%	34.3% **	38.9%	26.4%	12.5%
Overall hierarchical	52.9%	47.1%	5.7%	61.1%	38.9%	22.2% *
Overall consistency	17.1%	7.1%	10.0%	18.1%	9.7%	8.3%

Note: For net estimates, * indicates statistical significance at the 90% level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

ANNEX 4B: METROPLITAN ESTIMATES OF ADVERSE TREATMENT AGAINST SOUTHEAST ASIANS

MINNEAPOLIS -SOUTHEAST ASIAN/WHITE RENTAL TESTS

RENTAL TREATMENT MEASURES	SE Asian/White		
	% white favored	% SE Asian favored	net measure
Advertised unit available?	3.9%	3.9%	0.0%
Similar units available?	13.0%	11.7%	1.3%
Number units recommended	31.2%	18.2%	13.0%
Overall availability	32.5%	22.1%	10.4%
Advertised unit inspected?	10.4%	2.6%	7.8%
Similar units inspected	14.3%	3.9%	10.4% *
Number units inspected	24.7%	7.8%	16.9% **
Overall inspection	31.2%	10.4%	20.8% **
Rent for advertised unit	20.8%	10.4%	10.4%
Rental incentives offered?	6.5%	9.1%	-2.6%
Amount of security deposit	7.0%	2.3%	4.7%
Application fee required?	9.1%	5.2%	3.9%
Overall cost	20.8%	22.1%	-1.3%
Follow-up contact from agent?	2.6%	6.5%	-3.9%
Asked to complete application?	28.6%	11.7%	16.9% **
Arrangements for future?	18.2%	14.3%	3.9%
Told qualified to rent?	6.5%	15.6%	-9.1%
Overall encouragement	39.0%	35.1%	3.9%
Overall hierarchical	50.6%	40.3%	10.4%
Overall consistency	24.7%	13.0%	11.7%

Note: For net estimates, * indicates statistical significance at the 90% level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

ANNEX 5

MAINLAND U.S. ESTIMATES OF ADVERSE TREATMENT AGAINST ASIANS AND PACIFIC ISLANDERS

ANNEX 5A: API RENTAL TESTS -- NATIONAL VS. MAINLAND U.S.

HOUSING AVAILABILITY	National			Mainland U.S.		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit available?	7.2%	7.6%	-0.4%	7.1%	8.2%	-1.1%
Similar units available?	11.2%	11.0%	0.2%	10.6%	11.4%	-0.8%
Number units recommended	25.6%	21.7%	3.9%	23.1%	22.4%	0.7%
Overall availability	28.8%	24.0%	4.8%	26.3%	24.6%	1.8%
HOUSING INSPECTION	National			Mainland U.S.		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit inspected?	6.9%	10.9%	-4.0% *	7.7%	11.9%	-4.2%
Similar units inspected?	6.7%	6.5%	0.2%	7.5%	7.3%	0.2%
Number units inspected	12.9%	17.7%	-4.8%	14.2%	18.9%	-4.7%
Overall inspection	14.6%	20.0%	-5.3% *	16.1%	21.4%	-5.3%
HOUSING COST	National			Mainland U.S.		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Rent for advertised unit	10.1%	8.9%	1.2%	11.4%	10.0%	1.3%
Rental incentives offered?	9.1%	5.8%	3.3%	9.8%	6.1%	3.7%
Amount of security deposit	7.3%	10.1%	-2.8%	8.2%	11.3%	-3.2%
Application fee required?	8.4%	9.7%	-1.3%	8.6%	9.7%	-1.1%
Overall cost	18.5%	19.9%	-1.4%	19.8%	21.0%	-1.2%
AGENT ENCOURAGEMENT	National			Mainland U.S.		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Follow-up contact from agent?	4.9%	1.7%	3.2% **	4.2%	1.6%	2.6% *
Asked to complete application?	18.6%	19.1%	-0.4%	18.3%	18.4%	-0.2%
Credit check required?	13.0%	22.5%	-9.5% **	13.6%	21.3%	-7.6% **
Arrangements for future?	20.0%	12.5%	7.5% **	19.5%	12.4%	7.1% **
Overall encouragement	38.9%	36.6%	2.3%	38.4%	36.1%	2.3%
SUMMARY MEASURES	National			Mainland U.S.		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Hierarchical	47.8%	43.4%	4.3%	46.0%	45.1%	0.9%
Consistency	21.5%	17.4%	4.0%	21.5%	18.3%	3.2%

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

ANNEX 5B: API SALES TESTS -- NATIONAL VS. MAINLAND U.S.

HOUSING AVAILABILITY	National			Mainland U.S.		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit available?	15.6%	14.6%	1.0%	15.4%	14.0%	1.4%
Similar units available?	17.5%	11.0%	6.6% **	17.6%	10.6%	7.0% **
Number units recommended	46.3%	36.8%	9.5% *	46.0%	37.1%	8.9% *
Overall availability	49.3%	38.6%	10.7% **	49.1%	38.8%	10.3% *
HOUSING INSPECTION	National			Mainland U.S.		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Advertised unit inspected?	16.7%	10.9%	5.7% **	16.3%	10.9%	5.4% *
Similar units inspected	21.4%	11.9%	9.4% **	22.6%	11.6%	10.9% **
Number units inspected	45.7%	31.7%	14.0% **	46.0%	31.0%	15.0% **
Overall inspection	50.7%	31.9%	18.8% **	50.6%	31.3%	19.3% **
GEOGRAPHIC STEERING	National			Mainland U.S.		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Steering - homes recommended	18.4%	16.3%	2.1%	18.6%	15.9%	2.7%
Steering - homes inspected	15.1%	14.8%	0.3%	15.6%	14.8%	0.7%
FINANCING ASSISTANCE	National			Mainland U.S.		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Help with financing offered?	28.5%	13.5%	15.1% **	28.9%	13.0%	15.9% **
Agent prequalified tester?	22.8%	18.4%	4.4%	21.8%	17.5%	4.3%
Lenders recommended?	19.7%	14.4%	5.3%	18.6%	13.8%	4.9%
Overall financing	43.6%	28.3%	15.3% **	42.7%	27.6%	15.1% **
AGENT ENCOURAGEMENT	National			Mainland U.S.		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Follow-up contact from agent?	12.6%	13.1%	-0.5%	12.1%	12.9%	-0.9%
Prequalification required?	14.0%	5.8%	8.1% **	14.6%	5.9%	8.8% **
Told qualified?	23.6%	14.2%	9.4% **	23.7%	14.9%	8.7% **
Arrangements for future?	11.7%	8.7%	2.9%	12.4%	9.1%	3.3%
Overall encouragement	39.6%	31.9%	7.7% *	39.2%	32.7%	6.6%
SUMMARY MEASURES	National			Mainland U.S.		
	% white favored	% API favored	net measure	% white favored	% API favored	net measure
Hierarchical	58.7%	39.2%	19.6% **	58.2%	39.4%	18.8% **
Consistency	20.4%	8.6%	11.8% **	21.1%	8.6%	12.5% **

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

ANNEX 6

COMPARISON OF ADVERSE TREATMENT AGAINST ASIANS AND PACIFIC ISLANDERS, BLACKS, AND HISPANICS FOR COMPARABLE SUB-SAMPLES OF SITES

ANNEX 6A: COMPARISON OF ADVERSE TREATMENT AGAINST API'S AND BLACKS FOR COMPARABLE SUB-SAMPLES

RENTAL TREATMENT MEASURES	Black/White			API/White			Difference from Black/White		
	% white favored	% black favored	net measure	% white favored	% API favored	net measure	% white favored	% minority favored	net measure
Advertised unit available?	11.1%	9.3%	1.8%	7.2%	8.2%	-0.9%	3.9%	1.1%	2.7%
Similar units available?	13.3%	11.6%	1.7%	10.5%	10.7%	-0.2%	2.8%	0.9%	1.9%
Number units recommended	29.2%	18.5%	10.7% **	23.8%	22.0%	1.8%	5.4%	-3.5%	9.0%
Overall availability	30.8%	22.0%	8.7% **	27.0%	24.2%	2.8%	3.7%	-2.2%	5.9%
Advertised unit inspected?	13.1%	12.4%	0.7%	7.8%	13.0%	-5.1% *	5.3%	-0.6%	5.8%
Similar units inspected	11.8%	6.8%	5.0% **	7.8%	8.2%	-0.4%	4.0%	-1.3%	5.4%
Number units inspected	23.2%	19.4%	3.8%	14.3%	20.7%	-6.4% *	8.9% **	-1.3%	10.1% **
Overall inspection	26.5%	21.9%	4.5%	16.5%	23.5%	-7.0% *	10.0% **	-1.5%	11.5% **
Rent for advertised unit	10.8%	13.0%	-2.2%	10.9%	6.9%	4.0%	-0.1%	6.1% *	-6.2%
Rental incentives offered?	6.5%	8.2%	-1.7%	10.2%	6.0%	4.2%	-3.7%	2.1%	-5.8% *
Amount of security deposit	5.1%	4.3%	0.8%	9.4%	9.8%	-0.4%	-4.3%	-5.5%	1.2%
Application fee required?	9.4%	15.6%	-6.2% **	9.1%	11.0%	-1.9%	0.3%	4.6%	-4.3%
Overall cost	20.0%	24.7%	-4.7%	20.5%	20.7%	-0.1%	-0.5%	4.0%	-4.5%
Follow-up contact from agent?	2.5%	3.9%	-1.3%	3.7%	0.6%	3.0% **	-1.1%	3.3% **	-4.4% **
Asked to complete application?	16.8%	19.5%	-2.7%	19.3%	15.6%	3.8%	-2.5%	4.0%	-6.5%
Credit check required?	14.1%	18.2%	-4.2%	12.6%	20.8%	-8.1% **	1.4%	-2.5%	4.0%
Arrangements for future?	11.9%	15.8%	-4.0%	19.8%	13.1%	6.7% *	-8.0% **	2.7%	-10.6% **
Overall encouragement	30.0%	41.2%	-11.2% **	38.8%	33.5%	5.3%	-8.8% **	7.7% *	-16.4% **
Overall hierarchical	47.4%	45.5%	1.9%	47.4%	43.1%	4.3%	0.1%	2.5%	-2.4%
Overall consistency	19.6%	22.3%	-2.7%	22.3%	17.2%	5.2%	-2.7%	5.1%	-7.8%

Note: For net estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

SALES TREATMENT MEASURES	Black/White			API/White			Difference from Black/White		
	% white favored	% black favored	net measure	% white favored	% API favored	net measure	% white favored	% minority favored	net measure
Advertised unit available?	13.7%	12.8%	0.9%	15.9%	14.4%	1.6%	-2.2%	-1.6%	-0.7%
Similar units available?	18.0%	17.5%	0.5%	16.6%	12.2%	4.5%	1.4%	5.4%	-3.9%
Number units recommended	51.2%	31.1%	20.2% **	40.6%	41.1%	-0.5%	10.6% **	-10.1% **	20.7% **
Overall availability	49.4%	38.7%	10.7% **	46.1%	40.7%	5.3%	3.3%	-2.0%	5.3%
Advertised unit inspected?	13.6%	14.1%	-0.6%	16.8%	10.8%	6.1% *	-3.2%	3.4%	-6.6%
Similar units inspected?	21.3%	18.4%	2.9%	23.3%	13.3%	9.9% **	-2.0%	5.0%	-7.0%
Number units inspected	43.0%	33.2%	9.8% **	40.4%	34.3%	6.1%	2.7%	-1.1%	3.7%
Overall inspection	42.7%	36.7%	6.0%	47.3%	32.2%	15.1% **	-4.6%	4.4%	-9.1%
Steering - homes recommended	23.3%	13.1%	10.2% **	19.0%	14.9%	4.1%	4.3%	-1.8%	6.1%
Steering - homes inspected	16.4%	10.7%	5.8% **	15.1%	14.2%	0.9%	1.3%	-3.5%	4.8%
Help with financing offered?	16.2%	11.6%	4.5%	29.1%	13.6%	15.4% **	-12.9% **	-2.0%	-10.9% **
Agent prequalified tester?	22.4%	11.4%	11.0% **	20.1%	16.6%	3.5%	2.4%	-5.2%	7.6%
Lenders recommended?	17.4%	16.5%	0.8%	18.8%	14.4%	4.4%	-1.4%	2.1%	-3.6%
Overall financing	36.0%	23.0%	13.0% **	41.9%	27.1%	14.8% **	-5.8%	-4.1%	-1.7%
Follow-up contact from agent?	19.9%	16.1%	3.8%	11.3%	14.4%	-3.1%	8.6% **	1.8%	6.9%
Prequalification required?	12.2%	17.4%	-5.2% *	14.9%	6.9%	7.9% **	-2.7%	10.5% **	-13.1% **
Told qualified?	32.1%	9.9%	22.2% **	24.7%	14.7%	10.0% **	7.4% *	-4.8%	12.2% **
Arrangements for future?	3.4%	10.6%	-7.3% **	12.9%	9.4%	3.5%	-9.5% **	1.2%	-10.7% **
Overall encouragement	39.1%	32.1%	7.0%	39.3%	34.2%	5.1%	-0.3%	-2.1%	1.9%
Overall hierarchical	53.8%	44.1%	9.7% *	58.0%	39.6%	18.4% **	-4.2%	4.5%	-8.7%
Overall consistency	14.6%	11.7%	2.9%	20.6%	8.5%	12.1% **	-6.0% *	3.2%	-9.2% **

Note: For net estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

ANNEX 6B: COMPARISON OF ADVERSE TREATMENT AGAINST API'S AND HISPANICS FOR COMPARABLE SUB-SAMPLES

RENTAL TREATMENT MEASURES	Hispanic/N-H white			API/White			Diff from Hispanic/N-H white		
	% n-H white favored	% Hispanic favored	net measure	% white favored	% API favored	net measure	% white favored	% minority favored	net measure
Advertised unit available?	11.1%	4.8%	6.2% **	5.6%	8.1%	-2.5%	5.5%	-3.2%	8.7% **
Similar units available?	12.5%	11.6%	0.9%	10.5%	11.8%	-1.4%	2.1%	-0.2%	2.3%
Number units recommended	31.3%	17.4%	13.9% **	21.2%	22.1%	-0.9%	10.0% **	-4.8%	14.8% **
Overall availability	33.3%	19.9%	13.4% **	23.4%	24.8%	-1.4%	9.9% **	-4.9%	14.9% **
Advertised unit inspected?	13.9%	8.2%	5.7% **	7.8%	10.5%	-2.7%	6.0%	-2.3%	8.4% **
Similar units inspected	8.1%	8.2%	-0.1%	7.0%	7.1%	-0.1%	1.2%	1.2%	0.0%
Number units inspected	22.4%	16.0%	6.5% **	14.1%	17.2%	-3.1%	8.3% **	-1.2%	9.6% **
Overall inspection	25.8%	17.0%	8.8% **	15.6%	20.0%	-4.4%	10.2% **	-3.0%	13.2% **
Rent for advertised unit	14.9%	8.7%	6.1% *	9.7%	10.8%	-1.1%	5.2%	-2.1%	7.2%
Rental incentives offered?	9.4%	3.7%	5.7% **	9.1%	5.5%	3.6%	0.3%	-1.8%	2.1%
Amount of security deposit	11.6%	9.2%	2.4%	7.3%	12.5%	-5.2%	4.3%	-3.3%	7.6%
Application fee required?	13.6%	10.9%	2.7%	9.2%	10.6%	-1.3%	4.4%	0.4%	4.0%
Overall cost	26.8%	17.1%	9.7% **	19.1%	21.8%	-2.7%	7.8% **	-4.6%	12.4% **
Follow-up contact from agent?	3.9%	2.9%	0.9%	4.1%	1.6%	2.6% *	-0.3%	1.4%	-1.6%
Asked to complete application?	16.4%	18.8%	-2.4%	17.7%	19.7%	-2.0%	-1.3%	-0.9%	-0.4%
Credit check required?	18.4%	17.5%	1.0%	13.9%	20.1%	-6.2% *	4.6%	-2.6%	7.2%
Arrangements for future?	14.0%	19.9%	-5.9% **	20.2%	12.0%	8.2% **	-6.2% *	7.9% **	-14.1% **
Overall encouragement	35.4%	34.0%	1.4%	38.2%	35.9%	2.3%	-2.8%	-2.0%	-0.8%
Overall hierarchical	56.0%	35.9%	20.1% **	45.1%	45.3%	-0.2%	10.9% **	-9.4% **	20.4% **
Overall consistency	24.4%	14.9%	9.5% **	22.5%	19.5%	3.0%	1.9%	-4.6%	6.4%

Note: For net estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

SALES TREATMENT MEASURES	Hispanic/N-H white			API/White			Diff from Hispanic/N-H white		
	% n-H white favored	% Hispanic favored	net measure	% white favored	% API favored	net measure	% white favored	% minority favored	net measure
Advertised unit available?	10.6%	18.0%	-7.4% **	16.0%	13.6%	2.4%	-5.4%	4.4%	-9.8% **
Similar units available?	19.7%	10.9%	8.8% **	17.3%	9.3%	7.9% **	2.4%	1.5%	0.9%
Number units recommended	43.2%	36.8%	6.4%	46.7%	36.1%	10.5% *	-3.5%	0.7%	-4.1%
Overall availability	41.7%	44.8%	-3.2%	50.0%	37.9%	12.1% **	-8.4% **	6.9% *	-15.3% **
Advertised unit inspected?	11.0%	20.3%	-9.4% **	16.3%	10.9%	5.5% *	-5.4%	9.5% **	-14.8% **
Similar units inspected?	16.8%	12.6%	4.1%	22.4%	12.5%	9.9% **	-5.6%	0.1%	-5.7%
Number units inspected	36.2%	37.8%	-1.6%	46.1%	31.8%	14.3% **	-9.8% **	6.0%	-15.9% **
Overall inspection	35.5%	45.0%	-9.5% **	51.1%	31.8%	19.4% **	-15.6% **	13.2% **	-28.9% **
Steering - homes recommended	19.4%	15.1%	4.3%	19.1%	17.0%	2.1%	0.3%	-1.8%	2.2%
Steering - homes inspected	19.3%	12.6%	6.7% **	16.8%	16.0%	0.8%	2.5%	-3.4%	5.9%
Help with financing offered?	30.4%	9.5%	20.9% **	27.1%	13.1%	14.0% **	3.3%	-3.5%	6.8%
Agent prequalified tester?	28.5%	10.5%	18.1% **	23.0%	16.4%	6.6% *	5.6%	-5.9%	11.5% **
Lenders recommended?	29.6%	9.1%	20.5% **	19.0%	14.9%	4.1%	10.7% **	-5.7%	16.4% **
Overall financing	45.2%	18.4%	26.8% **	41.2%	28.4%	12.8% **	4.0%	-9.9% **	13.9% **
Follow-up contact from agent?	12.7%	14.2%	-1.5%	11.1%	13.7%	-2.6%	1.6%	0.5%	1.1%
Prequalification required?	6.9%	12.0%	-5.1% **	13.8%	6.5%	7.3% **	-6.9% **	5.5% *	-12.4% **
Told qualified?	23.9%	11.2%	12.7% **	25.2%	14.2%	11.0% **	-1.2%	-3.0%	1.7%
Arrangements for future?	7.8%	8.0%	-0.2%	12.7%	9.2%	3.5%	-4.9% *	-1.2%	-3.6%
Overall encouragement	34.9%	29.8%	5.1%	38.4%	33.6%	4.7%	-3.5%	-3.8%	0.4%
Overall hierarchical	49.8%	46.6%	3.2%	57.8%	39.6%	18.2% **	-8.1% **	7.0% *	-15.0% *
Overall consistency	21.7%	11.2%	10.6% **	20.7%	9.3%	11.4% **	1.0%	1.8%	-0.8%

Note: For net estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Discrimination in Metropolitan Housing Markets: Phase 2 - Asians and Pacific Islanders

ANNEX : API RENTAL TESTS -- ASIANS AND PACIFIC ISLANDERS VS. ASIANS ONLY

HOUSING AVAILABILITY	Asians and Pacific Islanders			Asians only		
	% white favored	% API favored	net measure	% white favored	% Asians favored	net measure
Advertised unit available?	7.2%	7.6%	-0.4%	7.0%	9.3%	-2.4%
Similar units available?	11.2%	11.0%	0.2%	11.5%	12.3%	-0.8%
Number units recommended	25.6%	21.7%	3.9%	23.5%	24.0%	-0.5%
Overall availability	28.8%	24.0%	4.8%	27.1%	26.1%	1.0%
HOUSING INSPECTION	Asians and Pacific Islanders			Asians only		
	% white favored	% API favored	net measure	% white favored	% Asians favored	net measure
Advertised unit inspected?	6.9%	10.9%	-4.0% *	7.5%	12.8%	-5.4% **
Similar units inspected?	6.7%	6.5%	0.2%	7.3%	7.4%	-0.1%
Number units inspected	12.9%	17.7%	-4.8%	13.9%	19.5%	-5.6%
Overall inspection	14.6%	20.0%	-5.3% *	16.1%	22.0%	-5.9%
HOUSING COST	Asians and Pacific Islanders			Asians only		
	% white favored	% API favored	net measure	% white favored	% Asians favored	net measure
Rent for advertised unit	10.1%	8.9%	1.2%	11.7%	10.0%	1.8%
Rental incentives offered?	9.1%	5.8%	3.3%	10.3%	5.8%	4.5% *
Amount of security deposit	7.3%	10.1%	-2.8%	7.5%	11.9%	-4.3%
Application fee required?	8.4%	9.7%	-1.3%	9.6%	8.6%	1.0%
Overall cost	18.5%	19.9%	-1.4%	21.3%	21.2%	0.1%
AGENT ENCOURAGEMENT	Asians and Pacific Islanders			Asians only		
	% white favored	% API favored	net measure	% white favored	% Asians favored	net measure
Follow-up contact from agent?	4.9%	1.7%	3.2% **	5.1%	2.2%	2.8% *
Asked to complete application?	18.6%	19.1%	-0.4%	17.5%	16.7%	0.8%
Credit check required?	13.0%	22.5%	-9.5% **	14.0%	21.4%	-7.4% **
Arrangements for future?	20.0%	12.5%	7.5% **	20.6%	11.7%	8.9% **
Overall encouragement	38.9%	36.6%	2.3%	40.9%	34.5%	6.4%
SUMMARY MEASURES	Asians and Pacific Islanders			Asians only		
	% white favored	% API favored	net measure	% white favored	% Asians favored	net measure
Hierarchical	47.8%	43.4%	4.3%	47.0%	44.7%	2.3%
Consistency	21.5%	17.4%	4.0%	23.9%	16.7%	7.2% *

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.

Discrimination in Metropolitan Housing Markets: Phase 2 - Asians and Pacific Islanders

ANNEX : API SALES TESTS -- ASIANS AND PACIFIC ISLANDERS VS. ASIANS ONLY

HOUSING AVAILABILITY	Asians and Pacific Islanders			Asians only		
	% white favored	% API favored	net measure	% white favored	% Asians favored	net measure
Advertised unit available?	15.6%	14.6%	1.0%	15.4%	14.8%	0.7%
Similar units available?	17.5%	11.0%	6.6% **	18.6%	10.9%	7.7% **
Number units recommended	46.3%	36.8%	9.5% *	47.8%	36.9%	10.9% **
Overall availability	49.3%	38.6%	10.7% **	49.8%	38.7%	11.2% **
HOUSING INSPECTION	Asians and Pacific Islanders			Asians only		
	% white favored	% API favored	net measure	% white favored	% Asians favored	net measure
Advertised unit inspected?	16.7%	10.9%	5.7% **	16.9%	11.1%	5.8% *
Similar units inspected	21.4%	11.9%	9.4% **	24.4%	12.6%	11.8% **
Number units inspected	45.7%	31.7%	14.0% **	48.7%	30.2%	18.5% **
Overall inspection	50.7%	31.9%	18.8% **	52.1%	31.4%	20.7% **
GEOGRAPHIC STEERING	Asians and Pacific Islanders			Asians only		
	% white favored	% API favored	net measure	% white favored	% Asians favored	net measure
Steering - homes recommended	18.4%	16.3%	2.1%	19.8%	15.2%	4.6%
Steering - homes inspected	15.1%	14.8%	0.3%	17.1%	14.7%	2.4%
FINANCING ASSISTANCE	Asians and Pacific Islanders			Asians only		
	% white favored	% API favored	net measure	% white favored	% Asians favored	net measure
Help with financing offered?	28.5%	13.5%	15.1% **	30.8%	13.2%	17.6% **
Agent prequalified tester?	22.8%	18.4%	4.4%	23.4%	18.1%	5.3%
Lenders recommended?	19.7%	14.4%	5.3%	19.8%	14.6%	5.2%
Overall financing	43.6%	28.3%	15.3% **	44.3%	29.9%	14.4% **
AGENT ENCOURAGEMENT	Asians and Pacific Islanders			Asians only		
	% white favored	% API favored	net measure	% white favored	% Asians favored	net measure
Follow-up contact from agent?	12.6%	13.1%	-0.5%	12.6%	14.8%	-2.1%
Prequalification required?	14.0%	5.8%	8.1% **	14.9%	6.1%	8.8% **
Told qualified?	23.6%	14.2%	9.4% **	25.5%	14.4%	11.2% **
Arrangements for future?	11.7%	8.7%	2.9%	11.8%	8.1%	3.7%
Overall encouragement	39.6%	31.9%	7.7% *	41.2%	33.1%	8.0%
SUMMARY MEASURES	Asians and Pacific Islanders			Asians only		
	% white favored	% API favored	net measure	% white favored	% Asians favored	net measure
Hierarchical	58.7%	39.2%	19.6% **	58.2%	39.9%	18.3% **
Consistency	20.4%	8.6%	11.8% **	19.9%	7.3%	12.6% **

Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.